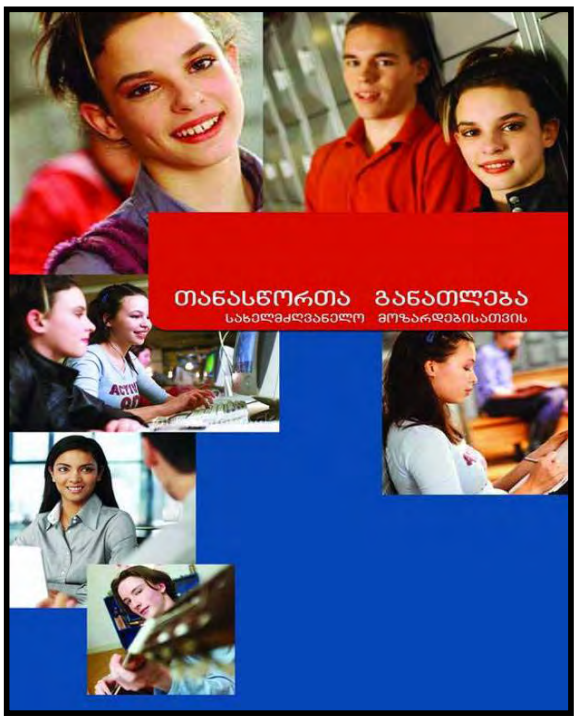
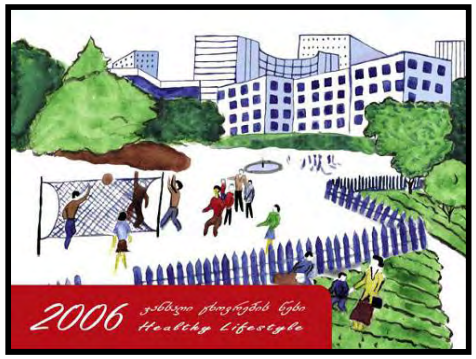
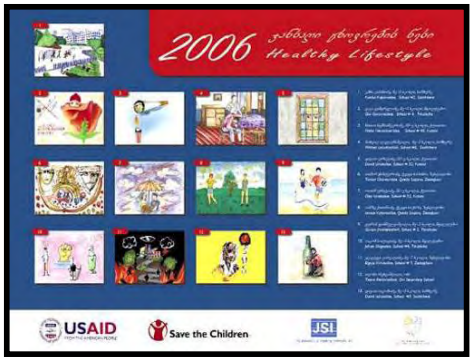
ASSESSING CHANGE IN THE KNOWLEDGE, ATTITUDES AND PRACTICES OF YOUTH IN TWO DISTRICTS OF IMERETI, GEORGIA, REGARDING HEALTHY LIFESTYLES AND REPRODUCTIVE HEALTH

Mid-Point Report for the BCC Component of the Healthy Women in Georgia (HWG) Project







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Acronyms

ARH – Adolescent Reproductive Health
BCC – Behavioral Change and Communication
BLS – BLS survey
CI – Confidence Intervals
FP – Family Planning
HIV/AIDS – Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HLS – Healthy Lifestyle Sessions
HLSS – Healthy Lifestyles Sessions Sample
HWG – Healthy Women in Georgia
IEC – Information, Education, Communication
JSI – John Snow, Inc.
KAP – Knowledge, Attitudes & Practices
MPS – Mid-point survey
RH – Reproductive health
SC – Save the Children
STIs – Sexually Transmitted Infections

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Assessing Change in the Knowledge, Attitudes and Practices of Youth in Two Districts of Imereti, Georgia, Regarding Healthy Lifestyles and Reproductive Health

Executive Summary

Improving adolescent reproductive health is generally recognized as a key development priority, especially with increasingly larger numbers of adolescents today than ever before. The vast majority of youth lives in developing countries and is at risk of adverse health outcomes that are preventable. Adolescence is also an important formative period during which many life style behaviors are learned and established. Thus, acquiring beneficial knowledge, developing positive attitudes, and establishing healthy practices and behaviors at an early age sets the stage for longer-term health.

Georgia, as many former Soviet states, came from a health care system that favored curative rather than preventative approaches to family planning; relied on abortion as birth control due to isolation from the development of modern, safe, and effective contraception elsewhere in the world; a lack of public information and discussion on reproductive health; and little attention given to providing accessible or affordable reproductive health services through various public and private providers. It is this context that adolescents in Georgia confront and that one component of the Healthy Women in Georgia (HWG) project, the behavioral change and communication (BCC) component, attempts to change by enhancing the knowledge, attitudes and practices of young adults regarding healthy lifestyles and reproductive health with in the Imereti region.

Before initiating behavioral change interventions, the HWG project decided to understand the current status of knowledge, attitudes and practices regarding healthy lifestyles and reproductive health by conducting a population-based baseline survey of youth 15 to 17 years of age in 2004 in the project implementation areas. To understand if change had occurred after two years of implementing BCC activities, a follow-up population-based mid-point survey was conducted in 2006 among youth of the same age in the same areas. Based on these surveys, this report discusses a) what were the levels of knowledge, attitudes and practices among youth about healthy lifestyles and reproductive health at the beginning of the project and b) had these levels changed significantly, especially in the desired direction by project mid-point.

One main BCC activity was conducting a series of Healthy Lifestyles Sessions (HLS) for youth. At the time of the mid-point study, slightly more than 500 youth attended. The HWG project wanted to know if the youth who attended these HLS had significantly higher levels of knowledge, attitudes and practices than youth in the general population at the mid-point survey. Thus, a survey was conducted among a sample of HLS participants using the same questionnaire as used in the population-based surveys.

Finally, by mid-point, the HWG project wanted to answer two additional questions: 1) what was the status of the project's BCC indicators toward end-of-project targets and, 2) what had been the impact of the project on individuals. To answer the first question, the mid-point survey results were compared to end-of-project targets for each indicator and evaluated for the probability of achieving the target. To answer the second question, i.e. assess the impact of the project on individuals, several case studies were conducted.

The main findings of these studies are the following:

Healthy Lifestyles Among Youth

- Not surprisingly, more boys than girls reported smoking; about 25% of boys and 2% of girls, and did not significantly change. The level of knowledge regarding the negative health consequences of smoking seems to be relatively high among youth, especially for certain diseases (pulmonary).
- By the mid-point study, there was an increase among youth who knew two or more harmful consequences of drinking alcohol. However, the percentage of boys who consume alcohol slightly increased over this period of time (76% to 85%), whereas for girls there was a significant decrease (72% to 51%).

Reproductive Health Issues Among Youth

- The vast majority of youth in the baseline and mid-point surveys (63% and 82%) said that learning about reproductive health was somewhat to very much important to them.
- For both girls and boys, friends are important source of information about reproductive issues. Girls sought information about sexual relations in the previous six months from friends, then their mother, whereas boys sought it from friends and then from magazines and TV.
- Almost 1 of every 5 youth in both surveys reported having sex; however, these youth who are having sex are virtually only boys. The majority of boys reported using a condom at last sex, whereas the few girls who had sex, none of them reported using any contraception.
- The vast majority of youth in both surveys (60% and 54% respectively) did not know what time during a woman's monthly cycle she has the greatest likelihood of becoming pregnant.
- There was a significant increase in the percentage of youth who could identify at one or more negative consequences of having an abortion; 50% in the baseline increasing to 70% at the mid-point survey. And just as important, there was a considerable increase in the percentage of youth knowing modern methods of contraception. Slightly more than 1 in 3 youth (38%) did not know of one contraceptive at the baseline decreasing to about 1 of every 10 youth (7%) at the mid-point.
- When asked if they plan on using a contraceptive the first time---or next time---they have sex, 77% of girls say they have not thought about it compared to 20% of boys. Moreover, the next largest percentage (10%) of girls responded, "I do not plan on using a contraceptive" compared to 7% of boys. The largest percentage of boys (53%) responded, "I plan to use a contraceptive and will not have sex without it."
- In both studies, the vast majority of youth know of HIV/AIDS; however, even at the MPS only small percentages of youth are knowledgeable about other sexually transmitted infections.
- Almost all youth know of HIV/AIDS and at least one mode of transmission (sexual intercourse) of HIV/AIDS in both studies. However, knowledge of the most common mode of transmission of HIV/AIDS in Georgia today, "sharing needles," is still relatively low among youth (42% in the baseline and 48% in mid-point).

Healthy Lifestyles Sessions

- The most significant outcome the HLS had on the youth who attended, compared to youth in the general population at the mid-point survey, was increasing their knowledge on almost all healthy lifestyle and reproductive health issues.
- The reproductive health issues in which the HLS did not appear to have much impact on knowledge and attitudes among attending youth were a) recommended sources to seek information on reproductive health and b) believe incorrectly that casual contact with an HIV/AIDS infected person is mode of HIV/AIDS transmission.
- Finally, HLS appears not to have substantially influenced the practices/behaviors of participants compared to youth in the general population. That is, HLS participants were as likely as their peers to smoke, drink alcohol, and uncertain whether they would use contraceptives the first—or next time---they have sex. This finding, though, is not surprising in that behavior change is slow and long-term.

Progress Toward Targets

Slightly less than one-half (41%) of the project indicator targets have been accomplished and another one-quarter (23%) are possible to reach by the end of the project, if the project is able to proceed on schedule as planned. Thus, the about two-thirds of all targets should be accomplished by project's end, most of which are knowledge-based. Given the slight increases from the baseline to the mid-point, most likely about one-third (36%) of the project's targets will not be accomplished. These indicators are about lifestyles of smoking and drinking, and the ABCD approach, and behaviors such as going to recommended RH counseling information and services.

Impact on Individuals

For youth the HWG project has impacted their lives in many ways. Most importantly, youth express that although hesitant to attend HLS and openly discuss such topics as healthy lifestyles and reproductive health in a co-ed setting, they are very pleased they did. Also, they are extremely pleased that many activities occur at school, since schooling is a major part of their lives, and the format of the sessions and

activities being fun and participatory. Moreover, they discuss these topics and messages with friends after school, and many youth have reported that they take home what they have learned and tell their family members, especially parents, encouraging them to think about healthy lifestyles.

Many of the youth view the HLS trainers and Peer Educators as "friends" more than "instructors," and more importantly, informed friends. Since the surveys conducted show that friends are a primary source of information for youth on RH issues, Peer Educators play a new, important role in individual counseling.

Another impact is that barriers have been lowered and taboos overcome about discussing their concerns or problems related to puberty, sexual relations and reproductive health. Not only are boy and girls openly discussion these issue among themselves, but with their boy/girl friend, and increasingly with adults.

Among school staff, and parents, who were at first quite concerned, the impact has been a more positive view of how these topics can be presented and addressed in an open forum of mixed youth. They have seen how the topics are handled, the process of using fun activities and prizes, and how assertive youth became about such topics as alcoholism, drug addiction and STIs. Some of the school administrators would like to see HLS become formalized into the school curriculum and some parents hope to have an HLS for Parents developed for them.

Summary of Recommendations

Listening to the radio is common among the vast majority of youth and is a cheap and effective means of communication. Moreover, many youth mentioned that other mass media (TV, radio, magazines) are primary sources of information about RH. Thus, mass media communication should continue. More specifically, from 2004 to 2006, there has been a shift from listening to Fortuna Plus and Imedi radio stations to *Ar Daidardo* station, which may mean a shift in HWG radio programs and spots.

Friends have increasingly become a main source of RH health information regardless of gender, age or location. Therefore, the outreach strategy of well-informed and accepted Peer Educators needs to be strengthened and expanded.

A small percentage of girls reported having sexual intercourse; however none of them used contraception. And, many girls were undecided if they would use contraception the first time, or next time, they had sex. Perhaps more positive messages of FP need to be included in the HLS, such as achieving a profession and having more income for child health care cost that delaying pregnancy may provide. That is, discussing how FP can help them to achieve their "hopes" and "dreams."

Overall, there was a substantial increase in the knowledge among youth of negative consequences of smoking. Nonetheless, those youth who knew many more negative consequences of smoking were as likely to smoke as youth who knew few. Again, perhaps some "positive" messages about not smoking (e.g., having more spendable cash for other things) should be included. Nonetheless, more than likely changes smoking behavior in a larger percentage of youth will take more time and effort than one project.

As shown in the 2005 Reproductive Health Study, pharmacists are the main providers of contraceptives in Georgia; however, most are untrained in contraceptive counseling. Likewise, in this study, most youth view pharmacist as the main provider of contraceptives. The Youth Friendly Pharmacy component will need to focus not only on services to youth, such as access and privacy, but also ensure those pharmacists are trained in providing youth-appropriate advice and counseling.

The Telephone Hotline service is known by almost 40% of all youth in 2006 in these two districts, but only 4% reported using service; the percentage of HLS participants who used the Hotline service is about double (9%). The project should evaluate whether, after 2 years, if this rate of knowledge and use of the Hotline service is satisfactory. The usage rate seems to be low and no youth in rural areas reported using the service. Those few youth who did use the service evaluated it highly, thus the low use is most likely not related to quality. The project should undertake a study to determine if this relatively low usage is due to some barriers, such as access (e.g., poor connection or busy lines) or stigma (e.g., fear of voice being recognized).

Introduction

Improving adolescent reproductive health is generally recognized as a key development priority. There are larger numbers of adolescents alive today than ever before. The vast majority of these youth lives in developing countries and is at risk of adverse health outcomes that are preventable. Adolescence is also an important formative period during which many life style behaviors are learned and established. Thus, acquiring beneficial knowledge, developing positive attitudes and establishing healthy behaviors/practices at an early age sets the stage for longer-term health.

The HWG project is a five-year project designed to improve reproductive health outcomes of youth and adults in selected districts of the Imereti, Kakheti, Tbilisi and Guria Regions of Georgia. It began in the fall of 2003 and is being implemented by John Snow Inc. Research & Training Institute (JSI) along with Save the Children (SC) and six local NGOs: Orthos, Curatio International Foundation, CLARITAS, Caucasus Social Marketing Association, HERA, and McCann Erickson. The project provides technical support and necessary supplies for the implementation of targeted activities.

Initially, HWG began as a pilot project in the Imereti Region. The choice of the Imereti Region for implementation of the HWG project was based on careful analysis of population data, receptiveness of stakeholders in the region to work with the program team to implement the activities, and potential for maximizing results through collaboration with other donors active in the new primary health initiative. Another reason was the relative poor status of existing health facilities in the Imereti Region, compared with other regions, was an important factor in its selection for implementation. There are twelve *rayon* (districts) in this region, with a total of 30 hospitals, 21 independent outpatient facilities, 14 dispensaries, 5 independent ambulance stations, 15 maternity hospitals, and 133 outpatient clinics.

The region's population is poised to benefit greatly from the activities planned for this program. The National Household Survey conducted by SC in February 2002 revealed that the Imereti Region ranked as the third most vulnerable (among 15 regions throughout Georgia) on a health vulnerability scale, and women reported the third lowest level of general satisfaction with their health status.[1] Women of reproductive age in Imereti also had the second highest percentage (28.1%) who reported being pregnant in the three months prior to the survey, and ranked fourth highest for the number of women ill in the previous three months who did not go to doctor because of cost concerns.

Other than the capital, Tbilisi, the Imereti Region represents the most populous region of Georgia (approximately 750,000). It is a historic area in western Georgia, situated along the middle and upper reaches of the Rioni river, bordered by Racha to the north, Kartli to the east, Samtskhe-Javakheti to the south, Guria and Samegrelo to the west.

The studies for this evaluation focused on two districts: Kutaisi and Zestaponi. The city of Kutaisi, the regional capital, is the second most populous largest city in Georgia (186,000), with only the capital, Tbilisi (1.1 million), being more populous.[2] Kutaisi has industries that produce trucks, mining and transport equipment, textiles, chemicals, and food products.

The district of Zestaponi contains 76,208 people (2002) with the vast majority (50,453 people) living in rural locations. Zestaponi is famous for metals production, its large ferro-alloy plant, and wine-making.

Background

The most extensive study of reproductive health in Georgia, conducted in 1999, concluded that Georgia has a very high rate of abortion---3.7 total abortions per woman, on average, which is possibly the highest in the world---and a low prevalence of modern methods of contraception.[3] This study found only 20%

[1] Dershem, Larry and Tea Khoperia. The Status of Household in Georgia – 2002. A Save the Children report to USAID, Tbilisi, Georgia.

[2] Population of Georgia, State Department of Statistics, "Table 6: Population by Regions (in thousands)," Tbilisi, 2003.

[3] Serbanescu, F., L. Morris, N. Nutsubidze, P. Imnadze, and M. Shaknazarova. 2000. *Reproductive Health Survey Georgia, 1999-2000: Preliminary Report.* Atlanta, Georgia: U.S. Department of Health and Human Services.

of married women age 15 to 44 using modern methods of contraception. Moreover, it found little to no demand for contraception, or abortion, until after the first pregnancy, with two-thirds of all married women having had an abortion. According to another study, conducted in 2004, Georgia has many more providers of abortions than family planning services.[4] This study goes on to report, "primary care physicians and nurses receive no training in family planning and are not permitted to provide information, counseling, or contraceptives about the subject; pharmacists and clerks, who are allowed to sell contraceptives, are also untrained." One of the main recommendations form this study was the need for a nation-wide education campaign to inform and educate women, men and couples about family planning.

One of HWG's most important strategies for the long-term gain of Georgian women primarily, but men also, is improving the reproductive health knowledge, attitudes and practices of adolescents. The premise is that promoting healthy lifestyles including reproductive health (RH) and family planning (FP) among youth and devising innovative, culturally appropriate methods of increasing their knowledge of, access to and utilization of RH services will pay dividends in the form of an increase in FP after marriage, lower abortion rates, and decreased maternal mortality and morbidity. Currently, Georgia the birthrate for adolescents 15-17 years of age (35 per 1,000) is ranked highest in the world with the US (34 per 1,000).[5]

Another reason further research and intervention targeting adolescents' knowledge and attitudes about FP is important, is the potential for an escalation of HIV prevalence in Georgia. Although the sero-prevalence rate is currently very low (less than 0.1%)[6], the level of social unrest and declining economic conditions are danger signs for the future.[7] Studies indicate that vulnerable populations, youth included, are more likely to engage in risky sexual and injecting drug practices due to less access to protection (condoms), being less informed about HIV/AIDS and its transmission, and having less access (physical and economic) to health services.[8]

Intervention: Behavioral Change and Communication (BCC) Component Activities

The attempt to promote positive change in adolescent lifestyles and reproductive behavior is a complex process, which requires an understanding of culture. Most BCC approaches recognize that providing facts alone does not ensure good decisions or behavior change. The HWG project views BCC for youth as a process of using communication approaches and tools to develop the skills and capabilities of adolescents to promote and manage their own lifestyles and health. HWG aims to cultivate positive change in adolescent knowledge, attitudes and behaviors, in partnership with families, schools, health services and communities to influence the social norms and policy environment.

A successful BCC strategy must be designed to be age-appropriate so as to enable youth to learn about, accept and change their behavior. The BCC component specifically targets adolescents who are 15 to 17 years of age. At this age, youth are influenced by many sources, such as peers, mass media, the community, and health care providers. Thus, the HWG project uses a strategy of reaching out to youth through the activities described below.

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[4] Abortion and Contraception in Georgia and Kazakhstan.
[5] Singh, Susheela and Jacqueline E. Darroch, "Adolescent Pregnancy and Childbearing: Levels and Trends in Developed Countries," Family Planning Perspectives, Volume 32, Number 1, January/February 2000.
[6] Infectious Diseases, AIDS and Clinical Immunology Research Center, Annual Report, 2004. Unpublished.
[7] Kelly, Jeffrey A. and Yuri A. Amirkhanian. "The Newest Epidemic: a Review of HIV/AIDS in Central and Eastern Europe," *International Journal of STD & AIDS*, 2003, 14: 361-371.
[8] Population Development and HIV/AIDS with Particular Emphasis on Poverty: the concise report. Department of Economic & Social Affairs, United Nations, New York, 2005. Html version: <http://www.un.org/esa/population/publications/concise2005/PopdevHIVAIDS.pdf >

Figure 1: Location of Kutaisi and Zestaponi districts in the Imereti region, Georgia.

SC's BCC activities include a) conducting Healthy Lifestyles Sessions, b) holding Health Awareness Activities, c) broadcasting radio programs, d) conducting Peer Education Training and Outreach, e) holding Theater Performances, f) providing a telephone Hotline Service, and g) distribution of materials.

Healthy Lifestyles Sessions (HLS): HLS are courses held after school that students attend on a volunteer basis. With the permission of the Headmaster, HLS course announcement posters are placed in the school, as well as teachers handing-out flyers and brochures. In 2005, 350 students attended 45 HLS in nine schools in Kutaisi and Zestaponi. In 2006, 450 students attended 50 HLS in ten schools in Kutaisi.[9] No HLS sessions were conducted in Zestaponi in 2006.[10]

Health Awareness Activities: These are various activities held at different locations that youth attend voluntarily. The goal of these activities is to allow the youth to have fun while they learn. Since the beginning of the project, health awareness activities have included 45 sport competitions, 60 health quizzes, 5 Art Exhibitions, 35 Newspaper Walls displays, and 10 other major health events, such as World AIDS Day, AIDS Memorial Day, and Breast Cancer Walk. Collectively, these health awareness activities reached approximately 5000 youth.

Radio Programs & Spots: A set of five radio programs were developed and recorded, with local radio stations broadcasting each program twice.[11] These radio programs are 30 minutes in length and provide an IEC counselor to discuss in detail one health topic as well as answering most frequently asked questions on the topic. In addition, a set of 15 short radio spots were developed, recorded, and broadcast on local radio stations. These spots run for nearly 1 minute and present only key messages on a particular health issue, such as STIs, HIV/AIDS, harmful consequences of drug use, smoking, or alcohol consumption. These short radio spots have been broadcast 2200 times to date.

Peer Education and Outreach: Peer education and outreach involves selection and training of certain youth to become Peer Educators. Peer Educators must attend 2 days of intensive training and then conduct various outreach activities, including counseling and training. A total of 475 Peer Educators have been

[9] In addition, in 2006, 800 students attended 80 HLS in 16 schools of 5 other districts in the Imereti region (Khoni, Terdjola, Bagdati, Tskaltubo, Samtredia).
[10] To date, HLS have been implemented it in five additional districts in the Imereti region: Tskaltubo, Khoni, Bagdati, Samtredia, Terdjola. In the upcoming 06-07 school year, HLS will be conducted in the remaining districts in the Imereti region: Vani, Tkibuli, Kharagauli, Sachkhere.
[11] Radio stations were selected based on radio listening findings from the BLS survey described further in the report.

trained to date; 235 in 2005, and 240 in 2006. Furthermore, 35 teachers were trained in Peer Educator supervision skills.

Theater Performances: These performances are specially designed to teach healthy lifestyles and convey reproductive health messages. There have been two types of theater performances; those conducted by professional actors and those conducted by Peer Educators. Six performances in Zestaponi and three in Kutaisi have been conducted by professionals. These professional actors are specially trained on "forum theatre techniques" by a US consultant as part of the Guria Adolescents Reproductive Health Project implemented by CARE International. Peer Educators have conducted a total of five performances: three in Zestaponi and two in Kutaisi.

Distribution of Information, Education & Communication (IEC) Materials: These are materials that have already been produced in other projects as well as materials that have been specifically developed within the HWG project. The following is a list of the nine basic types of materials and how many copies have been distributed through the ARH component of HWG to date:

1. Peer Educators Guidelines -550 copies
2. Healthy School Calendar - 1000 copies
3. Healthy Lifestyle (booklet) – 4000 copies
4. Healthy Lifestyle (poster) – 300 copies
5. HIV/AIDS (booklet) - 2000 copies
6. Sexually Transmitted Infections (booklet) – 1500 copies
7. Hotline Poster - 500 copies
8. Hotline Leaflet – 1500 copies
9. Breast Self-Examination – 1500 copies

Telephone "Hotline" Service: A telephone "hotline" service was developed by and is staffed by the local NGO, CLARITAS. The toll-free number is announced on the radio, during all activities, and printed on all the distributed materials. Since its inception in January of 2005 the hotline has received 1578 of the total 3756 calls (or 42%) from youth 15 to 17 years of age.

Survey Design

This report describes the findings of three surveys and three case studies. The first survey, the baseline survey or BLS, was a youth population survey conducted in November 2004, the second youth population survey, originally intended to be project end, became the mid-point survey or MPS because of a project extension. The MPS was conducted in May 2006.

The BLS was conducted in the districts of Kutaisi, Zestaponi and Chiatura. However, due to difficulties in implementing the most of the BCC activities in the district of Chiatura, it was not included in the MPS. Therefore, the two youth population-based surveys include youth only from Kutaisi and Zestaponi.

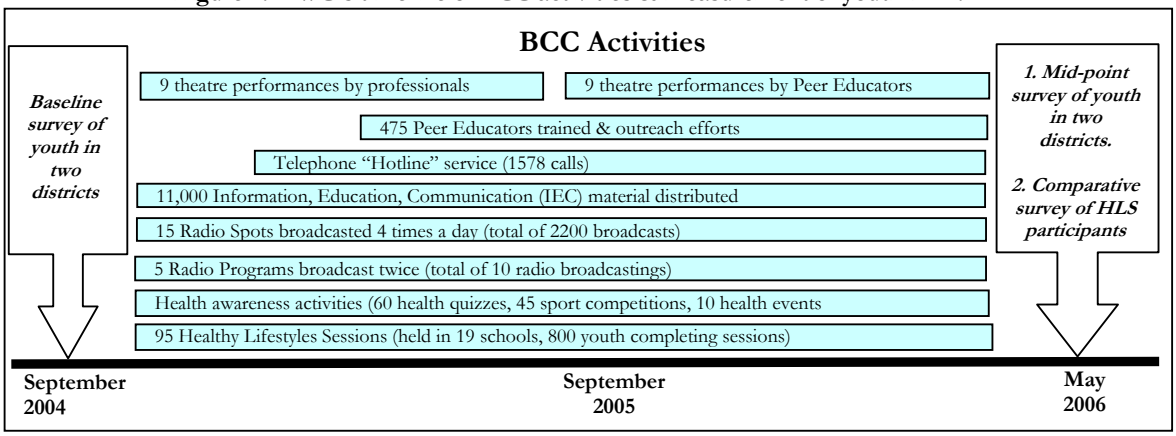
The third survey conducted was among Healthy Lifestyles Session participants using a systematic sampling procedure, hereafter referred to as the Healthy Lifestyle Session Survey (HLSS).

The operational objectives of the research were to:

1) Provide BLS healthy lifestyles and reproductive health KAP data among a representative sample of youth 15 to 17 years of age in the Kutaisi and Zestaponi against which project-end-line targets were established;
2) Provide healthy lifestyles and reproductive health KAP data comparable to the BLS data at the project's mid-point to assess the changes in KAP among youth and progress toward end-line targets;
3) Provide healthy lifestyles and reproductive health KAP data from a representative sample of youth who had successfully completed the Healthy Lifestyles Sessions to assess differences between this group and youth who did not participate; and
4) Supplement the quantitative survey data with cases studies that provide more individual-level perspectives.

The first three operational objectives were achieved using quantitative survey instruments and the last one using qualitative data collection techniques. More specifically the first objective was achieved by conducting the BLS among a population-based random sample of youth in Kutaisi and Zestaponi. The second was achieved by conducting the population-based MPS among a random sample of youth in the same two districts in May 2006. The third operational objective was achieved by conducting the HLSS among a random sample of participants, using a systematic sampling procedure, who had successfully completed a Healthy Lifestyle Session. Figure 2 illustrates the timeline of these activities. And, the final operational objective was achieved by conducting several in-depth interviews with three youth and one school administrator who had been involved in one or more of the project's activities.

Figure 2: HWG's timeline of BCC activities & measurement of youth KAP.



The questions that this report attempts to answer are:

1. What were the KAP of youth in these two districts at the beginning of the project on specific healthy lifestyle and reproductive health indicators?
2. At the project's mid-point, had the KAP of youth in these two districts significantly changed for these indicators?
3. Do mid-point results of youth indicate potential achievement of the end-line targets established for the indicators?
4. Do youth who have attended HLS have significantly higher levels of KAP on healthy lifestyles and reproductive health than non-participants?
5. What has been the impact of the project on selected individuals who have been involved in the project?

BLS and Mid-Point Surveys

Implementation: The BLS was implemented in November 2004 by the independent research firm from Tbilisi, the Institute for Polling & Marketing (IPM). The MPS was implemented in May 2006 by another independent research firm from Tbilisi, ACT-Research.[12] Each research firm provided sampling experts, questionnaire design experts, trained interviewers, and data entry and cleaning.

Sample sizes: The universe of the study consisted of adolescents aged 15 to 17 years living in households in the districts of Kutaisi and Zestaponi. The most ideal sample sizes would be sufficiently large enough to determine with 95% confidence the smallest percentage point change desired in the project targets, which is 5 percentage points.[13] This would require a margin of error no more than +/- 2% points. However,

[12] Different research firms were contracted for the baseline and mid-point surveys as an outcome of a competitive tender process following USAID regulations.
[13] 5% at the BLS to 10% at the end of the project for the indicator, "% of adolescents who know three or more consequences of having an abortion."

this level of precision would require a sample more than double than the 600 youth included in the BLS and MPS.

The BLS included a sample of 600 youth, but with excluding Chiatura district (as mentioned above) the BLS is a sample of 382 youth from Kutaisi and Zestaponi,[14] which provides a +/-5.1% margin-of-error with 95% confidence.

The MPS sample is 600 youth form Kutaisi and Zestaponi; however, 54 of these youth reported that they had participated in a HLS and thus were excluded from the MPS analysis.[15] As a result, the MPS sample size is 546 youth, which provides a +/- 4.1% margin-of-error with 95% confidence.

Table 1: Sample sizes for BLS and MPS.

	Random survey of youth in the Kutaisi and Zestaponi districts	
Characteristics	BLS	MPS
Location:		
Kutaisi (urban)	333	440
Zestaphoni – town (urban)	45	60
Zestaphoni – rural area (rural)	49	100
Gender:		
Boys	187	300
Girls	195	300
Ages:		
15 yrs	118	200
16 yrs	134	200
17 yrs	130	200
Sub-total	**382**	**600**
Participated in HWG Workshops	**---**	54
Total students in sample	**382**	**546**
Margin-of-error at 95% confidence	+/- 5.1	+/- 4.1

Selection of youth: IPM and ACT-Research obtained a list of settlements and streets within Kutaisi, the town of Zestaponi and the rural areas of Zestaponi from the State Department of Statistics. A two-stage cluster sample design was used. The first stage involved the selection, with probability proportional to size, of 60 points (streets in the urban centers and villages in the rural areas). The second stage involved identifying a random-walk starting point. At the starting point, every third residential household was selected. In the instance where the third household had no 15 to 17 year old, or the designated gender for quotas, the interviewer went to the next residential house. If parents were present, they were told that the survey was to obtain knowledge and attitudes youth regarding healthy lifestyles and reproductive health issues. If the parent consented, as well as the youth, then the interview was conducted; if a parent or youth refused, the interviewer moved to the next, third residential house. Moreover, if a parent or other member of the family insisted on attending the interview process, the interview was cancelled. Also, an age and gender quota was established to ensure there were a sufficient number of youth in each category. Since a quota of youth was used, post-weighting of the data for analysis was used to keep the finding representative.

Refusal rates: Verbal "informed consent" was obtained from each adolescent after the interviewer explained the topic and nature of the questions. For the BLS, a total of 27 adolescents (4%) refused to participate, of whom the vast majority lived in Kutaisi. For the MPS, at total of 17 adolescents (3%) refused

[14] 218 youth from Chiatura district were excluded in the BLS analysis as mentioned earlier.
[15] These 54 HLS participants that were obtained in the random sampling of youth in the general population were not included in the HLS sample that used a separate systematic sampling process to identify youth.

Data collection: Together, SC and JSI developed the KAP questionnaire and tailored it for boys and girls (e.g., s/he pronouns) and for two gender-specific questions; one question about signs of puberty and another about negative consequences of smoking. The questionnaires were pre-tested in locations near Tbilisi and the finalized Georgian versions were produced by each research firm. Finally, in order to enhance response rate on sensitive questions, male interviewers interviewed boys and female interviewers interviewed girls.

The majority of the questionnaire was administered by an interviewer, with the last few remaining questions, some of the most sensitive, being self-administered. The interviewer instructed the youth to complete the questionnaire by themselves, within site of the interviewer, and once they were done to fold the questionnaire, place it in an envelope the interviewer provided the respondent, seal it, and give it back to the interviewer. Average interview time/length was 30 minutes.

Nature of KAP Questions: The vast majority of all questions were open-ended. The project recognized that open-ended questions, generally, obtain lower frequencies of responses than closed-ended questions. Yet, the project decided that open-ended questions better represented how "salient" the information was to the respondent. The few closed-ended questions were for new issues that had been recently introduced in the program, such as early marriage.

Another important issue related to RH studies is controlling for "social desirability bias," that is responses given to the interviewer in a way that reflects positively on the respondent, with positively meaning that a respondent may either overstate or understate a behavior. To reduce this bias, the most sensitive questions, e.g., "have you had sex?" were self-administered.

Data analysis of significant differences: The overall findings of the BLS and MPS will be compared to each other. First, the results will be examined to determine if there has been a change, and if so, in the desired direction. Second, if there is a change, a significant difference between the two findings will be based on if the margin-of-errors of the results, at 95% confidence, do not overlap. As mentioned above, the margins-of-error, at 95% confidence, are +/- 5.1% for the BLS and +/- 4.1% for the MPS. Examples of findings of significance and non-significance are illustrated below.

For the first question the result from the BLS (85.7%) and the MPS (56.8%) are significantly different since the two confidence intervals (CI) do not overlap. For the second question, even though the percentage of youth who did not know where to get reproductive health services declined from 11.5% in the BLS to 5.4% in the MPS, this difference is not significant since the CIs for both findings overlap.

Table 2: Example illustrating significant different between survey results.

Question:	**BLS** (CI +/- 5.1%)	**MPS** (CI +/- 4.1%)	**Significance**
% of youth responding "**don't know**" to, "What are signs/symptoms of an STI infection?"	**85.7%** (80.6% – 90.8%)	**56.8%** (52.7% – 60.9%)	Significantly different
% of youth responding "**don't know**" to, "Where can someone get reproductive health services?"	**11.5%** (6.4% – 16.6%)	**5.4%** (1.3% – 9.5%)	Not significantly different

Finally, it is not possible to attribute all of the significant changes between BLS and the MPS results and between the HLS group and the comparison group to the HWG interventions alone. There are a few projects being implemented within the region as well as other influences, such as some TV programs, magazine articles, and access to RH information via Internet via Internet Cafes; however, the HWG is the only formal and sizeable project focusing on adolescent reproductive health in these districts during these surveys. For this reason, the HWG project has reason to believe that a sizeable portion of the significant changes in the KAP of youth reported here is due to the efforts of the project.

For simplicity of presentation in the narrative (but not tables), percentages will be reported by rounding them to the nearest whole number.

Healthy Lifestyle Session's Survey (HLSS)

Implementation: The survey of HLS participants was also implemented by the private research firm from Tbilisi, ACT-Research. It provided sampling experts, questionnaire design experts, trained interviewers, and data entry and cleaning.

Sample sizes: The universe of the study consisted of all 545 youth who had completed a HLS course since the beginning of the project. Due to budget and time limitations, 200 HLS participants were interviewed, which provides +/- 6% margin-of-error with 95% confidence.

Selection of youth: SC provided ACT-Research a list of the 545 HLS youth, specifying their gender, age and district. A sample of HLS youth was identified using a systematic method of selecting every 3rd name on the list.[16] To reduce the cost of traveling throughout the districts to interview these youth, three special events were held and the selected youth were invited. On the day of the event ACT-Research with SC staff identified each youth, ask them to participate in the survey. Upon consent, the interviewer and the respondent went to a private location away from the activities to conduct the interview. The same method of interviewing was used as in the BLS and MPS; face-to-face with the remaining questions self-administered, the respondent placing the questionnaire in an envelope, sealing it and giving it to the interviewer.

Refusal rates: Verbal "informed consent" was obtained from each invited HLS youth after the interviewer explained the topic and nature of the questions. None of the HLS youth refused to be interviewed.

Data collection: The same questionnaires used for boys and girls in the BLS and MPS were used for interviewing the HLS participants.

Table 3: Sample sizes for mid-point and HLS surveys.

	May 2006	
Characteristics	MPS	HLSS
Location:		
Kutaisi (urban)	440	117
Zestaponi – town (urban)	60	31
Zestaponi – rural area (rural)	100	52
Gender:		
Boys	300	87
Girls	300	113
Ages:		
15 yrs	200	56
16 yrs	200	73
17 yrs	200	71
Sub-total	**600**	**200**
Participated in HWG Workshops	54	200
Total students in sample	**546**	**200**
Margin-of-error at 95% confidence	+/- 4.1	+/- 6.3

Data analysis of significant differences: Only the overall findings of the mid-point and the HLS surveys will be compared since the HLS sample size is too small to compare differences by gender, age and location. For the overall findings, significant difference between the two findings will be based on if the margin-of-errors of the results, at 95% confidence, do not overlap. As mentioned above, the margins-of-error, at 95% confidence, are +/- 4.1% for the mid-point survey and +/- 6.3% for the HLS survey.

[16] An additional 50 HLS participants were accounted for in the systematic sample as replacements in case of refusal.

Throughout the report the HLS survey will be referred to as HLSS. And again, for simplicity of presentation, all percentages will be reported by rounding them to the nearest whole number.

Case Studies

HWG project staff decided to supplement the survey findings with three cases studies of individuals who had participated in one or more the project's activities. These case studies were conducted with the goal of providing greater insight into the personal impact of project activities on individuals' attitudes and practices related to healthy lifestyles and reproductive health. Two of the case studies are of youth who had self-reported to the HWG staff how the project had helped them with a particular problem they were having in their lives. One case is about two youth facing difficulties with an early marriage decision and the other case about a young boy confronting drug abuse.

The last case study is of school officials and several parents. Outreach to youth in this project occurs at and in schools, though not exclusively. School administrators, and parental support, are very important to the project's success. This case study examines the attitudes and perspectives of school administrators and parents before and after being involved in the project.

These case studies involved a series of in-depth interviews with respondents. HWG staff identified each of the four cases and was instrumental in designing the interview guide with the ACT-Research. Once the interview guides were completed, HWG staff contacted and recruited each respondent, and introduced them to ACT-Research's interviewer. In addition, HWG staff provided help to ACT-Research in clarifying issues or arranging further interviews, if needed.

ACT-Research conducted the interviews in locations selected by respondents following the interview guide using hand-written notes, and when the respondent gave permission, audio recordings. From these hand-written notes and audio recordings transcripts were made, and a final reports on each case based on these transcripts were submitted to HWG staff.

Characteristics of Youth

Presence and level of education of parents

Parents can play an important role in the knowledge, attitudes and behaviors of their children. Involvement of parents in the lives of their children is important in establishing certain expectations, communication of values, counseling on issues, monitoring of behavior, and supervision, all of which may provide certain protections against high-risk behaviors. Also, parental education seems to play an important intermediate role in lowering high-risk behaviors because parents with higher levels of education are more likely to know more about reproductive health issues, and thus feel more comfortable in providing reliable counseling, place higher expectations on their children for achieving higher education and higher status professions thus avoiding early pregnancy, as well as being involved with the local school in providing healthy lifestyle programming. In spite of this, having both parents in the house and being well-educated do not ensure knowledgeable or well-behaved children, especially if the relationship is contentious and communication is minimal. At least for girls, as will be discussed below, mothers are the second most important source of information on reproductive health information after doctors.

Overall, almost all youth in these districts come from homes with both parents present. If only one parent is present, it is generally the mother. In the BLS all youth came from homes with both parents present. In the MPS, 21 (or 4%) came from homes in which the father was not present and 1 youth from a home with the mother not present. Thus, about 4% of all youth in the MPS came from one-parent households.

Besides having parents present, among these youth, two-thirds (66%) reported having three or more adults in their household. At both BLS and MPS, about 4% of youth surveyed were living in households with one adult, 30% with two adults, and 66% with three or more adults. On average number

of adults per house was 2.7 people in the BLS and 3.1 people in the MPS. This shows that many youth came from households in which there are adult siblings, grandparents, or other relatives present.

Parents of urban youth were more likely to have completed more years of education than rural parents. Parents in urban areas are more likely to have completed a university degree whereas parents in rural areas are more likely to have a secondary education, or some form of vocational training. Consistent with this is that more urban youth plan to attend university or technical education (92% in the BLS and 90% in the MPS) than do rural youth (79% in the BLS and 85% in the MPS).

There is close to parental equity in levels of education within urban and rural areas. For example, in the mid-point survey, urban youth lived in households in which 83% of fathers and 77% of mothers had some post-secondary education. Comparatively, rural youth lived in households in which 41% of fathers and 47% of mothers completed some post-secondary education.

Since a greater share of urban parents have higher levels of education than rural parents, it is not surprising that more urban youth plan on attending university or technical education beyond secondary schooling than rural youth. In the mid-point survey, 90% of urban youth reported they plan on continuing their education compared to 85% of rural youth. Boys were slightly less likely to plan on attending university or technical education in the future than girls, though in general most youth want to attend university after secondary schooling.

Table 4: Do you plan on attending university or technical education in the future?

	%		
Characteristics*	BLS	MPS	HLSS
Total	90.3	89.5	97.0
Location:			
Urban	91.7	90.4	97.9
Rural	78.7	84.6	94.9
Gender:			
Boys	85.7	85.8	95.4
Girls	96.9	93.4	98.2

* Weighted data presented.

Very few (5 or 1%) of these youth are married and those who are, are from urban areas: three are 16 year old girls and two are boys, one 15 years of age and the other 17 years of age.[17] None of the youth are formally engaged.

Radio Listening Preferences

Listening to the radio is a common habit for many youth in these districts as indicated by the 2004 BLS. Since radio provides a cost-effective means of potentially reaching to large urban and dispersed rural areas, radio programs and spots were developed. Radio programs ran for 30 minutes and covered a one reproductive health topic. The radio spots were short, about one minute long, and were aimed at key messages on a reproductive health topic. Both formats attempt to present ideas and messages that help inform and begin the process of dealing with taboo subjects.

Moreover, it is important to understand which radio stations are listened to most by youth, and if there are particular preferences by gender or location (market segmentation) to better target those messages.

A vast majority of youth listen to radio as demonstrated in both surveys. Slightly more that 80% of youth said they listen to the radio, regardless of gender, age or urban/rural location. In the BLS, there was slightly more segmentation of youth preferences based on urban/rural location; however, by the MPS

[17] According to the 2002 census, nation-wide 8% of youth 15-19 years of age were either married, widow or divorced (*Major Findings of First General National Population Census of Georgia in 2002*, Statistics Booklet, State Department of Statistics, Tbilisi, 2004).

those preferential differences mostly diminished. In the BLS, urban youth preferred *Fortuna Plus* whereas rural youth preferred *Imedi*. During the MPS, many urban and rural youth had shifted from listening to *Fortuna Plus* and *Imedi* to listening to the station, *Ar Daidardo* (*Don't Worry*).

At the 2006 MPS, for urban youth in these districts, the most listened-to radio stations are, *Fortuna Plus*, *Ar Daidardo*, and "other" smaller stations; for rural youth in these districts they are *Ar Daidardo*, *Fortuna Plus* and *Fortuna*.

Prior Exposure to Reproductive Health Information

With other projects having been implemented in these districts, it was vital to understand how many youth had attended workshops, sessions and/or courses related to healthy lifestyles and reproductive health in the previous six months. Overall, when filtering out those youth who had attended the HWG sessions, approximately 10% of youth in both the BLS and MPS had attended other health related courses. This indicates that any changes in KAP among the majority (90%) of the youth can be reasonably attributed to the numerous activities, IEC materials and mass media outreach of the HWG project.

For those few who did attend a health related session or workshop other than the HWG project, most (60% - 70%) reported topics such as healthy habits, with a smaller percentage reporting the topics of puberty, STIs, and early marriage. Hence, this finding supports that previous statement that the HWG project is the only formal, organized effort addressing adolescent reproductive health in these districts.

Results of BLS and MPS

Healthy Lifestyles

Smoking

Decreasing the percentage of youth who try smoking is a challenge as indicated by the percentage of youth reported smoking remaining unchanged at the MPS. Comparing the BLS and MPS, there was no significant difference between percentages of youth who had *never smoked* (80% vs. 74%), or who had smoked and quit (6% vs. 13%).[18] Not too surprisingly, the overwhelmingly majority of youth who did smoke, in both studies, were 17 year old boys, regardless of urban/rural location; less than 2% of girls reported smoking, as shown in Table 17.

[18] Comparatively, the results of the 2002 Global Youth Tobacco Survey (GYTS) (Department of Public Health, MoLHSA , 2002, Tbilisi, Georgia) in Georgia, a school-based survey of students in grades 7, 8 and 9 (12 to 14 years of age), showed that 22.1% are current smokers. Boys were significantly more likely than girls to currently smoke cigarettes (32.6% versus 12.1%). Current cigarette smoking was significantly higher in the other urban (29.5%) and rural regions (32.5%) compared to Tbilisi (13.7%). Over half (52.2%) of ever smokers initiated smoking before age 10, with early initiation significantly higher in the other urban and rural regions compared to Tbilisi. This report also added two comments, "An interesting aspect is that, although selling tobacco products to minors (under 18 years old) is prohibited in Georgia, more than 50% of current smokers were able to purchase cigarettes in stores, and almost 100% of those who bought were not refused because of their age" and "The impact of the smoker image (that has more friends, is more attractive, etc.) promoted by tobacco industry is not so popular amongst young Georgians. Only around 15 % of them think that smoking makes you have more friends and around 20 % think that smokers look more attractive." In a similar the Global Youth Tobacco Study, conducted in 2005 in Ukraine, 9% of youth reported to smoke on a daily basis; 11% of boys and 6% of girls http://www.cdc.gov/tobacco/global/gyts/ factsheets/2005/ Ukraine_factsheet.htm. In 2005 in the US, 45.7% of youth reported never smoking (National Youth Risk Behavioral Surveillance Survey: 1991 – 2005, "Trends in the prevalence of cigarette use," Dept. of Health & Human Services, Center for Disease Control, http://www.cdc.gov/yrbss.

Table 5: Percentage of youth by frequency of smoking.

Frequency of smoking*	Total %	
	BLS	MPS
Never smoked	80.1	74.6
Smoked, but quit	5.8	13.4
Smoke	13.0	12.4
No response	1.0	0.0
Total	100.0	100.0

* Weighted data presented.

Although there was no marked improvement in smoking behavior, there was a limited improvement in the knowledge of certain negative health consequences of smoking among youth. The reason why there was a limited or partial improvement is that there was no significant difference between the percentages of boys and girls who knew at least one negative consequence of smoking in both studies (Table 18 and Table 19). However, there was a significant increase in the percentage who youth, both boys and girls, who could cite two or more negative consequences of smoking. In the BLS, 29% of boys and 52% of girls could cite 2 or more negative consequences of smoking increasing to 55% for boys and 65% for girls in the MPS. Urban youth were primarily responsible for this increase. Overall, rural boys were the least knowledgeable about the negative health consequences of smoking.

Boys increasingly learned about the harmful consequences of cancer and pre-mature dying, whereas more girls increased their awareness about cancer and pregnancy complications.

In summary, although there was not an increase in the percentage of youth who knew at least one negative consequence of smoking, there was an increase in the percentage of youth who knew two or more negative consequences.

Alcohol

As with smoking, decreasing the percentage of youth who drink alcohol is a challenge as indicated by the percentage of youth who drink remaining unchanged. An almost similar percentage of youth reported drinking alcohol in both studies (73% and 68%). In addition, these are higher rates than smoking, which places alcohol consumption as a substantially higher-risk behavior among youth.[19]

Table 6: Percentage of youth who consume alcohol.

Frequency consuming alcohol*	Total %	
	BLS	MPS
Never	25.9	31.2
Yes	73.4	67.5
Don't know	0.7	1.3
Total	100.0	100.0

* Weighted data presented.

As is generally known, alcohol (wine, vodka) is used in many Georgian cultural practices, ceremonies and rituals. Thus, youth are exposed to alcohol consumption, and often excessive consumption. One 16 year old boy who called the Telephone Hotline asked,

> *"We are given many lectures about how bad alcohol is. All the members of my family drink alcohol, but they are alive and healthy. Why shouldn't I drink alcohol?"*

[19] Comparatively, in 2005 in the US, 43.3% of youth reported current use of alcohol (National Youth Risk Behavioral Surveillance Survey: 1991 – 2005, "Trends in the prevalence of cigarette use," Dept. of Health & Human Services, Center for Disease Control) http://www.cdc.gov/yrbss .

The overall trend of no change in drinking alcohol conceals some differences among boys and girls. Even though the overall percentages of youth drinking alcohol at the time of the BLS and MPS were not statistically significant, there is consistently a different picture of alcohol consumption by gender. In both studies, a greater percentage of boys than girls reported consuming alcohol, and there were different trends among boys and girls for drinking (Table 22). Comparing BLS and MPS, there was an increase among boys who reported drinking (76% to 85%), whereas for girls there was a decline (72% to 51%).[20]

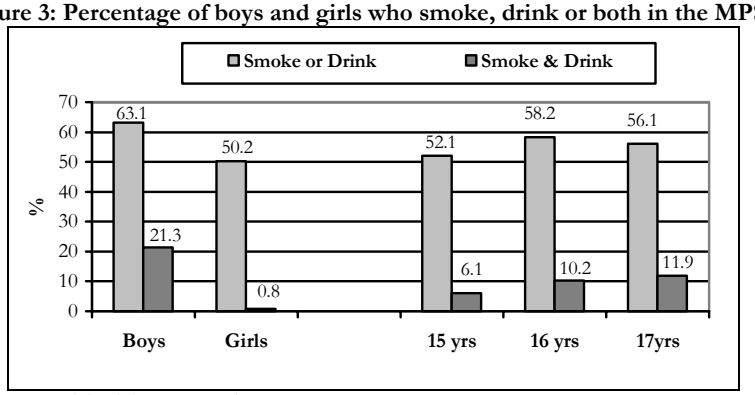
Unlike smoking, there was a substantial improvement in the percentage of youth who knew at least one negative health consequences of drinking as well as an increase in the total number of negative consequences known. In the BLS, almost 1 of every 4 youth (24%) could not identify a negative consequence of drinking alcohol, declining significantly to less than 1 of every 10 youth (8%) in the MPS (see Table 23). Furthermore, there was a significant increase in the percentage of youth who could cite two or more negative consequences; from 17% in 2004 to 42% in 2006, mostly accounted for by rural youth. Of all the negative consequences cited by youth, the largest increase was that more youth knew about liver disorders.

Not only was there a substantial increase in knowledge about negative consequences of drinking alcohol in general, but there was a substantial increase in the percentage of youth who knew about the negative health effect of drinking alcohol during pregnancy. The percentage of youth who could *not* cite at least one negative consequence of drinking alcohol during pregnancy declined by almost two times (27% to 16%) from the BLS to MPS (Table 25). Most of this decline was accounted for by the increase of knowledge among 16 year old boys and youth living in rural areas. The negative consequences most cited by youth were physical and mental problems for the newborn.

Smoking, Drinking or Neither

At the mid-point study, almost two-thirds of youth were practicing--to some degree--an unhealthy lifestyle, which declined from 2004 but not significantly. That is, at mid-point, overall, 57% of youth reported either smoking or drinking, 12% reported doing both and this was not statistically significantly different from the BLS values (62% and 16% respectively). Sixteen and 17 year olds, and boys, report these behaviors most frequently. There is no difference between urban and rural areas. As shown in Figure 3, 21% of boys reported both smoking and drinking compared to less than 1% of girls. Additionally, the percentage of youth who smoked and drank alcohol appears to increase with age, doubling from 15 to 17 years of age (6% and 12% respectively).

Figure 3: Percentage of boys and girls who smoke, drink or both in the MPS.*



* Weighted data presented.

[20] Comparatively, in both studies a higher percentage of girls reported drinking alcohol than smoking. Perhaps some of these differences are due to more stigmas associated with smoking than drinking among girls?

Signs of Puberty

Overall, there were substantial improvements among boys and girls in knowing the signs of puberty, especially for boys. In both studies, virtually all girls could identify one or more signs of puberty, which was not the case for boys. At BLS, 2 of every 5 boys (40%) could *not* identify one sign of puberty; however, this substantially declined to less than 1 of every 10 boys (7%) in 2006 (Table 28 and Table 30).

Even thought most girls knew at least one sign of puberty at the BLS (beginning of menstruation-85%), at the mid-point survey a significantly higher percentage of girls cited increase in breast size (from 38% to 74%) and hair growing in the pubic and underarm areas (from 6% to 26%). Overall, the proportion of girls who knew three or more signs of puberty jumped from 37% in the BLS to 54% at the mid-point survey.

Like for girls, the overall percentage of boys who knew three or more signs of puberty increased (from 11% in the BLS to 75% at the mid-point- Table 29 and Table 31). More specifically, boys became aware of three signs of puberty the most over this period of time: a) hair growing in pubic/underarm areas (7% to 51%), b) voice becoming deeper (7% to 57%), and c) presence of pimples (1% to 37%). Nonetheless, disappointingly, less than 3% of boys identified "wet dreams" in either study[21], as illustrated by a young boy who called the Telephone Hotline and asked,

> *"My pants often get wet in the morning. Am I ill?"*

Reproductive Health Seeking Behavior

Reproductive Health Information and Services

Information

In both studies a similar percentage of youth who reported knowing where to go for information about reproductive health; however, increasingly friends became a more important source of this information. There was no change in the percentage of youth who reported that they *did not know* where to obtain information on reproductive health issues (9% in 2002 and 2% in 2006); thus, few youth are uncertain where to go to get reproductive health information (Table 33).

The sources they go to for this information did not change, except for one, friends. In the BLS 6% of youth cited friends as a source of information on general reproductive health issue increasing to 29% at the mid-point survey. This increased use of friends occurred among youth, regardless of gender, age or location.

In rank order, the most important sources of reproductive health information for girls are doctors, mother and friends; for boys these sources are doctor, friends and father. Interestingly, although not significant, when considering two main strategies of the HWG project, Peer Educators and the Hotline Telephone service, in the mid-point survey Peer Educators were cited by 1 of every 10 youth (10%) with less than 1% mentioning the Hotline telephone service. This could be due to either youth being more aware of Peer Educators or preferring to talk about RH issues with someone they trust than the Hotline Telephone service.

Services

Even though the vast majority of all youth in both studies reported they knew where to get reproductive health services, more importantly, their awareness of better providers increased. In the BLS, most youth reported two providers of reproductive health services: clinics (57%) and

[21] Possibly this low level of responses is related to shame, which reduces identifying it as a sign of puberty.

maternity hospitals (27%), whereas in the MPS they cited clinics (76%) and women's consultation centers (18%). Only 14% of youth mentioned maternity hospitals in 2006 (Table 35).

Two providers of reproductive health services were significantly cited more and two cited less in the MPS than they were in the BLS survey; those cited more were clinics and Reproductive Health (RH) Cabinets and those cited less were maternity hospitals and ambulatories. One health service that increased, although not significantly, was pharmacies, from 1% to 8% of youth. When contrasted with the question above about where to obtain RH information, youth tend to view pharmacies as a provider of RH services more than information.

For boys the most frequently cited providers for reproductive health services were clinics, followed by RH Cabinets and pharmacies. For girls, the most frequently cited providers were clinics, and at a distant second and third, maternity hospitals and RH cabinets.

Questions About Sexual Relations

A significantly greater percentage of youth reported seeking information on sexual relations in 2006 than in 2004, and boys more than girls reported seeking this information. In 2004, 39% of youth sought information on sexual relations in the previous six months increasing to 59% in 2006 (Table 40). Boys, and youth living in urban areas, accounted for the largest part of the increase.

Youth are increasingly seeking sexual information, with girls seeking it primarily from two sources and boys from three sources. Those girls who sought information on sexual relations in the previous six months did so from friends, in 2004 (25%) and 2006 (16%), and increasingly more from their mothers —from 0% in 2004 to 11% in 2006. Boys sought this information primarily from friends, in 2004 (16%) and 2006 (18%), and increasingly more from magazines and TV in 2006 (12% each).

Since 2004 more youth reported knowing a "reliable" source of information on sexual relations; however, most of the sources they cited are not generally considered reliable sources.[22] That is, nearly a third (29%) of youth in the BLS reported *not* knowing any reliable source of information on sexual relations, significantly decreasing in the mid-point survey almost three fold (to 10%). This decrease occurred for boys and girls, all ages, and by urban and rural areas (Table 41). The most substantial increase of being cited as a reliable source for information on sexual relations was for a gynecologist (14% in 2004 to 22% in 2006).[23] But even with this increase, the percentage of youth who consider a gynecologist as a reliable source for this information is low. The two other sources youth increasingly cited as reliable were TV (4% to 11%) and magazines (2% to 7%).

In rank order, in 2006, the most reliable sources of information on sexual relations for girls were a) gynecologist, b) mother, and c) friends. For boys, these were a) gynecologist, b) TV and c) friends.

Pregnancy

The majority of girls and boys remain uncertain when a woman is most likely to become pregnant. When asked what time during a woman's monthly cycle she has the greatest change of becoming pregnant, in 2006 almost one-half (54%) of all youth said they did not know, which was not substantially different than the percentage of youth who did not know in 2004 (60%). Moreover, at MPS the majority (26%) of youth that did state an incorrect time (right after her period has ended). This is not significantly different compared with 2004 findings (Table 42). Only 10% of girls and 13% of boys selected "in the middle of her period", which is the correct answer.

[22] Interviewers asked each youth to define reliable as "the most accurate or most knowledgeable."
[23] Although a more specific question, in the *Georgia Reproductive Health Study, 1999-2000*, only 10% of all women cited physicians as a source of information about contraceptives.

In addition to now knowing when a woman is most likely to become pregnant, other youth are uncertain if other types of sex can result in pregnancy. Youth who have called the Telephone Hotline have asked,

"Is it possible to get pregnant from a kiss?"

and

"Is it possible to become pregnant from oral or anal sex?"

Despite not knowing when a woman is most likely to get pregnant, almost three-quarters of youth know complications of early pregnancy (asked only in 2006). Only 25% of youth did not know of any complications associated with early pregnancy, with a very small percentage (3%) saying there were none (Table 43). Youth who were least likely to know complications of early pregnancy were boys, 15 year olds, and rural youth.

Girls most frequently cited six complications of early pregnancy: mental & physical disabilities of the child (33%), premature birth (30%), maternal death (25%), stillbirth (23%), bleeding (23%), and spontaneous abortion (21%). Boys, however, most frequently cited only three complications: stillbirth (23%), low birth weight (22%), and premature birth (16%).

Abortion

Significantly more youth were able to identify adverse health consequences of having an abortion in 2006 than did in 2004. One-half (50%) of youth did not know any health consequences of having an aborting at BLS declining to nearly one-third (30%) at mid-point (Table 44). The largest part of this decline was accounted for by 17 year olds, boys and youth living in urban areas. Not only were a greater percent of youth able to identify negative health consequences of an abortion, but a significantly larger percentage were able to identify two or more consequences (19% in 2004 vs. 30% in 2006).

The three consequences with the largest increase of being cited by youth, from the BLS to mid-point surveys, were sterility (59%), infections (17%) and bleeding (12%).

Contraceptives

There was a considerable increase in the percentage of youth knowing contraceptive methods. Slightly more than 1 in 3 youth (38%) *did not know* of one contraceptive in 2004. This decreased to less than 1 of every 10 youth (7%) in 2006 (Table 46).[24] The increase in knowledge about contraceptives occurred for girls and boys, all ages, and in both urban and rural locations. In addition, the percentage of youth who knew two or more methods of contraception increased from 31% to 63%. The contraceptive methods most known in 2004, and known by more youth in 2006, were condoms (48% to 85%), the pill (34% to 61%), and IUDs (13% to 21%).[25]

Although there was no significant change in the proportion of youth having sex, there was a significant increase in the percentage using a contraceptive when they had sex. In both studies about 1 of every 5 youth reported having had sex, with virtually all of them boys, and the majority of them being 17 year olds and youth from urban areas (Table 48). Less than 2% of girls in both studies report having sex.[26] When asked if they used a contraceptive at their last intercourse in the BLS, 65%

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[24] Interestingly, the *Reproductive Health Survey – Georgia 2005* (Summary Report. Department of Health and Human Services, CDC, Atlanta. 2005) reported that among 2000 women aged 15-24 in Georgia 6% had not heard of a modern contraceptive. Moreover, this report stated that women in the Imereti region, among women in the other regions, had the highest level of contraceptive awareness.

[25] The *Reproductive Health Survey – Georgia 2005* also reported that the three most recognized modern contraceptives among women were condoms (93%), IUD (87%) and pills (67%).

[26] Other studies report similar findings: (Kachkachishvili Y. 1999. *Analysis of Sociological Survey on Reproductive Health Related Problems among Residents of Tbilisi.* The New Paradigms, #3; Goodwin R., Kozlova A., Nizharadze G., &

reporting doing so increasing to 79% in the MPS. Troublingly, though, is that even though the number of girls who had sex is few (5), only one of the five thought she had used a "contraceptive" by douching.[27]

For some youth, there is some confusion about it a contraceptive can be used at first sex. One youth asked a counselor for the Telephone Hotline,

> *"Is it possible to use a condom at first sexual intercourse?"*

Overwhelmingly, condoms are the preferred contraceptive used by youth, and most obtain them from a pharmacy, with a few youth obtaining them from a friend. Practically all (98% of the 49 youth in 2004 and 92% of the 98 youth in 2006) who reported having used a contraceptive at their last sexual intercourse said they used condoms (Table 51). When asked where they obtained the contraceptive they used at last intercourse, approximately 80% of them in 2004 and 2006 reported from a pharmacy.[28] About 1 in 7 (14%) youth reported getting it from a friend in 2006, which was a modest but not significant increase from 2004 (6%).

When asked (in 2006 only) if they plan on using a contraceptive the first time---or next time---they have sex, the vast majority of girls say they have not thought about it or they do not plan on using a contraceptive, which is quite different than boys. Slightly more than three-quarters (77%) of the girls reported that they had not thought about using a contraceptive at first sex or the next time they have sex, compared to one-fifth (20%) of boys (Table 52).[29] Moreover, the next largest

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Polyakova G. 2004. HIV/AIDS amongst adolescents in Eastern Europe: Knowledge of HIV/AIDS, social representations of risk and sexual activity amongst school children and homeless adolescents in Russia, Georgia and the Ukraine. *Journal of Health Psychology*, Vol. 9, pp. 381-396; UNESCO 2005. *HIV/AIDS in Georgia: A socio-cultural approach*. Published by Culture and Development Section, Division of Culture Policies and Intercultural Dialogue. Paris, France; *Georgia Reproductive Health Study, 1999-2000; Reproductive Health Survey – Georgia 2005*). Kachkachishvili reported that 94% of a sample group of single women who were interviewed in Tbilisi have never had sex. Goodwin et al. reported that out of 250 interviewed girls aged from 14 to 17, 87% said that they had not had sexual relations. In *Georgia Reproductive Health Study-1999,* out of more than 2,000 female respondents of reproductive age (16-45), only 1.3% said that they had sexual relations before marriage. In addition, this study reported that 85% of women believe a woman should be a virgin at marriage. In the follow-up survey, the *Reproductive Health Survey – Georgia 2005* states that 86% of 930 women aged 15-19 years reported having no sexual experience vs. 12.9% marital and 0.7% premarital sexual experience. The UNESCO report of HIV/AIDS in Georgia stated that, "Across the Caucasus region, there is little social stigma for men who employ a female commercial sex worker. In a survey among youth (Adolescent's Reproductive Health Survey, UNFPA, 2002, Tbilisi, Georgia), 84% of males 15-17 years of age thought it was acceptable to start their sexual life before marriage with a female sex worker. Moreover, 74% [CSW] reported that they had had sexual intercourse with a sex worker. Premarital sexual debut with CSW for young men is also viewed as acceptable in Armenia, and even preferable in Azerbaijan.

[27] The *Reproductive Health Survey – Georgia 2005* reported that almost all respondents (99%) did not use any contraception at first sexual intercourse, the most commonly cited reasons for which were wanted to get pregnant (78%), not thinking about using a method (14%) and not knowing about contraception (5%).

[28] According to the *Reproductive Health Survey – Georgia 2005* pharmacies were the principal provider of condoms, supplying more than three-fourths of women who reported their partners were using condoms; they were also the leading source for pill users (88%). Women reporting the condoms as their main contraceptive method stated that their partner was the second source. Less than one percent of women reported obtaining condoms in the public medical sector.

[29] This finding is bolstered by findings from other studies. Kachkachishvili finds that "under the Georgian socio-cultural standards, Georgian women begin having sex only when they get married. Premarital sex is intolerable to public opinion and perceived as an immoral act severely affecting the young women's image. While having pre- or extra-marital sexual experiences for men is quite acceptable, women are usually condemned for the same behavior, and are unlikely to discuss their sexual experiences in public, or even in anonymous surveys. The 'tradition of virginity' still dominates in the Georgian society. Suzanne Olds et al. report that "once married, Georgian women desire a child. There is no demand for contraception, or abortion, until after the birth of the first child, and three-quarters of women do not use contraception before their first pregnancy." Finally, the UNESCO report concludes that "the great majority of the population of Georgia belongs to the Georgian Orthodox Church (GOC), the influence of which has been increasing vastly since the country independence. The ideology of the GOC is rather conservative; liberalism, feminism and other modern trends meet consistent counteraction from the church.

percentage (10%) of girls responded, "I do not plan on using a contraceptive" compared to 7% of boys. The largest percentage of boys (53%) responded, "I plan to use a contraceptive and will not have sex without it."

STIs and HIV/AIDS

There was a significantly increase in the percentage of youth knowing what "safe sex" means as well as a greater percentage knowing 2 or more ways of having "safe sex." In 2004 somewhat more than one-half (56%) of youth did not know what "safe sex" meant decreasing significantly to nearly one-quarter (23%) of youth in 2006 (Table 53). A large portion of this decrease was accounted for by boys (53% to 7%) and youth in rural areas (89% to 34%). Additionally, and although still quite low, the percentage of youth who could name two or more way of having "safe sex" increase significantly, from 2% in 2004 to 17% in 2006. The two ways of having "safe sex" identified by most youth were a) using condoms (70%) and b) avoiding sex with prostitutes (12%). Only a small percentage (6%) mentioned abstaining from sex or avoiding multiple sex partners.

Knowledge about reasons for using a condom increased to the point where practically all youth know at least one reason. At the BLS, 84% of youth correctly mentioned one or more reasons to use a condom significantly increasing to 97% of youth in the MPS (Table 55). Girls accounted for most of this increase (76% in 2004 decreasing to 95% in 2006). The proportion of all youth who could identify two or more reasons doubled, from 32% in 2004 to 68% in 2006. In both studies, the three main reasons given for using a condom were, a) avoid pregnancy, b) protection against STIs, and c) protection against HIV/AIDS. Interestingly, the main reason girls give for using a condom is to avoid pregnancy, whereas the main reason for boys is protection against STIs.

Although the percentage of youth who knew of sexually transmitted infections (STIs) did not increase (it was already high from knowledge of HIV/AIDS), there was a substantial increase in the percentage of youth who could identify more types of STIs. The vast majority of youth in both studies (90% in BLS and 96% in MPS) knew of at least one sexually transmitted infection, and the vast majority of these youth cited only HIV/AIDS. After HIV/AIDS, the proportion of youth who can identify other infections drops drastically. Other STIs identified by the youth were syphilis (24%), Hepatitis B (10%) and gonorrhea (6%), with only a few youth identifying herpes (1%) or Chlamydia (1%). In 2006, 37% of boys identified syphilis whereas only 9% of girls did.

There was a substantial improvement in the percentage of boys who could name signs or symptoms that suggest a person has an STI, whereas for girls it remained low. Overall, 86% of youth could not name one sign or symptom of an STI at BLS decreasing to 57% at mid-point (Table 61); however, this decrease was accounted for primarily by boys (84% in 2004 to 43% in 2006); the change for girls was much less (87% to 72%) but still significant. Furthermore, not only did a greater percentage of boys identify signs or symptoms of an STI, but they named more relevant signs than the girls. That is, boys named a) discharge from penis/vagina (37%), b) painful urination (21%), and c) burning pain/itching around penis/vagina (17%). The small percentage of girls that identified a sign of an STI named only a) loss of weight (15%) and b) "other" (13%); only a very small percentage of girls named discharge from penis/vagina (3%), painful urination (3%) or abnormal vaginal bleeding (4%).

Awareness of HIV/AIDS did not change since, in both studies, virtually all the youth had heard of HIV/AIDS. Regardless of gender, age or location the vast majority (98%) of youth had heard of HIV/AIDS.

Although the percentage of youth who know how HIV/AIDS is transmitted did not change substantially (it was already high), there was an increase in the percentage of youth who knew at least one new mode of transmission and a decrease in the percentage who cited one misconception. In 2004 and 2006, most youth knew that HIV/AIDS is transmitted by sexual intercourse (85% in 2002 and 88% in 2006), see Table 62. In both surveys slightly less than one-half

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According to its dogma, pre- and extra-marital sex is viewed as a sin, thus discouraging from having multiple sexual partners."

reported 'sharing needles' (42% in 2002 and 48% in 2006). The largest increase between the two surveys was in the percentage of youth who identified transmission through blood transfusions (18% in 2002 to 56% in 2006). In addition, there was a significant decrease in the percentage of youth who mentioned the misconception of HIV/AIDS being transmitted through casual contact with an infected person (18% in 2004 to 8% in 2006).[30] Nonetheless, the Telephone Hotline receives calls from youth asking,

"Is it possible to spread AIDS by exchanging shoes, using the same towel, or giving a kiss?"

There was a significant increase in the percentage of youth who know ways to avoid getting HIV/AIDS. The percentage of youth who *did not know* of a way to avoid getting HIV/AIDS dropped from 47% in 2004 to 10% in 2006 (Table 66). This decline occurred for boys and girls, all ages, and urban and rural locations. However, in 2006, a greater proportion of rural youth (22%) did not know ways to avoid HIV/AIDS compared to urban youth (7%). Increased knowledge of three ways of avoiding HIV/AIDS accounted for this change between the two surveys: 1) use of condoms (32% vs. 64%),[31] 2) avoid contaminated blood (6% vs. 19%), and 3) avoid prostitutes (7% vs. 19%).

In rank order, the ways youth know to avoid getting HIV/AIDS in 2006 are: 1) use condoms[64%], 2) avoid sharing needles [22%], 3) avoid prostitutes [19%], 4) avoid contaminated blood [19%], 5) stay faithful to one partner [13%], 6) avoid casual sex [10%], and 7) abstinence [10%].

Awareness of the ABCD Approach did not change either because, in both studies, effectively none of the youth had heard of this approach. In the BLS no youth (0%) had heard of the ABCD Approach and in 2006 only 2% (or 11) of youth had (Table 57). When these 11 youth were asked if they could correctly cite the meaning of each letter, 5 could cite the meaning of A (**a**bstinence), 4 could cite the meaning of B (**b**e faithful), with only 2 youth were able to cite the meaning of C (**c**ondom use) and D (avoid **d**rugs).

Comparison of MPS with HLSS

The findings from the population-based sample of youth in the 2006 MPS will be compared to the systematic sample of youth who attended the healthy lifestyles sessions (HLSS). For sake of brevity, the MPS will be referred to as the "comparison group."

Healthy Lifestyles

Smoking

There was no difference between the percentages of youth who smoke or do not smoke regardless if they attended the HLS or not. Although the percentage of HLSS who smoke (7%) is lower than the comparison youth (13%), it is within the margin-of-error, thus not significantly different.

An almost equal proportion of the HLSS and the comparison youth knew of a negative health consequence of smoking; however, the main difference was that HLSS could identify many more negative consequences of smoking than comparison youth. For both boys and girls, whether they participated in the HLS or not, 90% or more knew at least one negative consequence of smoking---primarily pulmonary disease. The most significant difference between the HLSS youth and the comparison youth is that the HLSS identified more negative consequences of smoking. For

[30] In a multi-country (Georgia, Russia, Ukraine) study of HIV/AIDS among adolescents, between 2001- 2004, Goodwin et al. reported that Georgian adolescents were the least knowledgeable about HIV/AIDS transmission of all three countries. For example, 40% of Georgian youth believed that it was possible to get HIV/AIDS from shaking hands with an infected person (15% in Russian and Ukraine) and 22% from kissing on the cheek (10% in Russia and Ukraine).

[31] The increase to 67% is almost the same percentage reported by Goodwin et al. in their study (68%) on knowledge among youth that condoms can prevent the transmission of HIV/AIDS. But again, this rate is lower than found in Russia and Ukraine (90%).

example, 47% of the boys from the HLSS cited three or more negative consequences of smoking while only 10% of boys in the comparison group; for girls, it was 68% vs. 32% respectively.

In addition, a greater percentage of HLSS boys identified cardiovascular disease, cancer and pulmonary disease than boys in the comparison group. For girls, a greater proportion of HLSS girls identified cancer, cardiovascular disease, increase peptic ulcers, and more pain during menstruation than girls in the comparison group.

Alcohol

As with smoking, there was no significant difference between the HLSS and the comparison group. That is, almost two-thirds of HLSS and youth in the comparison group reported that they consume alcohol.

Table 7: Frequency of consuming alcohol by MPS & HLSS youth (in %).

Frequency consuming alcohol*	Total % MPS comparison	HLSS
Never	31.2	39.5
Yes	67.5	60.5
Don't know	1.3	0.0
Total	100.0	100.0

*Weighted data presented.

Similar to smoking, there was a significant difference between the percentage of HLSS and comparison youth who knew at least one negative consequence of alcohol consumption; however, there was a significant difference between these groups on the number of negative consequences known. About 1 of every 8 (12%) of youth in the comparison group could identify three or more negative consequences of drinking alcohol, which was substantially lower than 1 of every 3 (33%) for the HLSS. A significantly greater proportion of HLSS than comparison youth cited memory disorder, liver dysfunction, psychosis, gastro-enteric diseases, and sexual dysfunction.

A much smaller proportion of youth in the comparison group knew the negative consequences of drinking during pregnancy, and when they did they were less likely to know as many negative consequences as HLSS youth. Virtually all (98%) of HLSS knew of at least one negative consequence of drinking alcohol during pregnancy compared to 85% of youth in the comparison group. Furthermore, 60% of HLSS knew three or more vs. 16% for the comparison youth. The HLSS had much higher rates than youth in the comparison group of knowing the potential negative consequences of drinking during pregnancy (in rank order): the death of the mother, physical defects of the newborn, death of a fetus and mental defects of the new born.

Smoking, Drinking or Neither

Not unlike their non-participating peers, almost two-thirds of the HLSS practice to some degree an unhealthy lifestyle. That is, 56% of the HLSS reported smoking or drinking, 6% reporting doing both. This is not significantly different from youth in the mid-point comparison group.

Table 8: Percentage of mid-point & HLS youth who smoke and/or drink alcohol (in %).

Smoking & Drinking*	Total % MPS comparison	HLSS
Neither smoke/drink	31.6	38.5
Smoke or drink	56.9	56.0
Both smoke and drink	11.5	5.5
Total	100.0	100.0

*Weighted data presented.

Signs of Puberty

Almost two times more HLSS youth knew three or more signs of puberty than youth in the comparison group. Among the HLSS girls 90% identified three or more signs of puberty compared to 54% of girls in the comparison group. The difference between the HLS boys and boys in the comparison group, who identified three or more signs of puberty, was even greater: 32% vs. 72% respectively.

A greater proportion of HLSS girls identified all the signs of puberty than girls in the comparison group. However, for the boys, there as no significant difference in the rate of HLSS and comparison boys who identified two signs of puberty: voice getting deeper (57% vs. 65%) and experiencing "wet dreams" (2% vs. 7%). Disappointingly, very few boys, whether they had attended HLS or not, identified "wet dreams."

Reproductive Health Seeking Behavior

Questions About Reproductive Health in General and Services

Overall, there as no difference between HLSS and comparison youth on reporting that they knew where to go when seeking information on reproductive health. Almost all (98% for both groups) said they knew where to obtain information on reproductive health. Moreover, both groups of youth cited (in rank order) gynecologist, mother and friends. The only significant difference between these two groups of youth was that more HLSS youth cited the Telephone Hotline than mid-point survey youth (17% vs. 1%).

Again, HLSS youth and youth in the comparison group were quite similar in the proportion of them reporting they knew where to go for reproductive health services and in the service providers they identified. Over 90% of both groups of youth stated they were knowledgeable where to get reproductive health services. In addition, both groups identified at almost equal rates, four kinds of service providers: clinics, women's consultation centers, maternity hospitals, and reproductive health cabinets.

Questions About Sexual Relations

A substantially greater percentage of HLSS youth sought information on sexual relations in the previous six months than youth in the comparison group; however, the sources of this information were basically the same. That is, 74% of HLSS youth reported seeking information on sexual relations in the previous six month compared to 59% of youth in the comparison group. And, just like the comparison group youth, HLSS youth primarily sought this information from friends. Nonetheless, one difference between these two groups of youth was that a slightly higher percentage of HLSS reported three sources (friends, mother, trainings/courses) whereas youth in the comparison group mentioned basically one source, friends.

When asked, "Which source they consider the most reliable for information on sexual relations" there was no difference between HLSS and the comparison youth. Both groups of youth reported, in equal proportions, that they knew of reliable sources and also the sources identified by each groups were the same (gynecologist, mother, and friends).

Pregnancy

The majority of HLSS knew when a woman is most likely to become pregnant whereas the majority of youth in the comparison group did not. When asked what time during a woman's monthly cycle she has the greatest change of becoming pregnant, 54% of youth in the comparison group said they "did not know" compared to only 15% of HLSS. Furthermore, the largest percentage (25%) of the comparison youth, who said they knew, cited "right after her period has ended," which is

incorrect. Two-thirds (65%) of the HLSS correctly reported, "in the middle of her period," compared to only 10% of youth in the comparison group.

HLSS youth also knew significantly more complications related to early pregnancy than youth in the comparison group. One-quarter (25%) of youth in the comparison group did not know of any complications associated with early pregnancy, compared to 10% of the HLSS youth not knowing any. A significantly higher percentage of HLSS youth were aware of the following complication more than comparison youth: maternal death, low birth weight, bleeding, premature birth, high-level of childhood illnesses, and stillbirth.

Abortion

A significantly larger proportion of HLSS youth identified adverse health consequences of having an abortion, and more various types of adverse consequences, than youth in the comparison group. Almost one-third (30%) of youth in the comparison group *did not know* of any adverse health consequences to having an abortion, which was significantly higher than the 3% of HLSS youth who did not know. In addition, 43% HLSS youth cited three or more consequences compared to only 12% of youth in the comparison group who could. The adverse consequences of sterility, bleeding and cervical injury were cited at considerably higher rates by HLSS than comparison youth.

Contraceptives

Youth in the comparison group were as likely to know about at least one modern contraceptive method as HLSS youth (condoms), but HLSS youth were aware of more types of contraceptives. Almost all (99%) of HLSS said they knew of at least one contraceptive, condoms, compared to 93% of youth in the comparison group. However, significantly more HLSS than comparison youth knew about pills (79% vs. 61%) and IUDs (38% vs. 21%).

No difference was found between HLSS and youth in the comparison group in the rates of having sex, use of contraceptives at last intercourse, and where contraceptives were obtained. Almost one-quarter (23%) of youth in the comparison group reported having sex compared to 15% of HLSS youth, which was within the margin-of-error. More than 70% of youth who reported have had sex from both groups reported using a contraceptive at last intercourse with the vast majority (90%) of them using condoms. When asked where they, obtained the condoms, the primary sources were pharmacies, then from friends who most likely got the condoms from a pharmacy.

Surprisingly, there was no difference between the HLSS and comparison youth on whether they plan on using a contraceptive the first time---or next time---they have sex. Almost one-half of HLSS (49%) and comparison youth (47%) reported that they *had not thought about* using a contraceptive at first sex or the next time they have sex. Additionally, only about one-third of HLSS (36%) youth and youth in the comparison group (30%) responded, "I plan to use a contraceptive and will not have sex without it."

STIs and HIV/AIDS

A greater percentage of HLSS youth knew what "safe sex" meant than youth in the comparison group, but the difference was just barely significant. That is, 88% of HLSS youth knew ways of having "safe sex" compared to 77% of youth in the comparison group, which was due to more HLSS youth citing "using a condom." All other ways of having "safe sex" were equally identified by both groups of youth.

Practically all HLSS and comparison youth knew of at least one reason for using a condom; however, a significantly higher percentage of HLSS youth identified the dual protection of condoms. Practically all (99%) of HLSS youth and 93% of youth in the comparison group knew at least one reason for using a condom, to avoid pregnancy. In contrast though, a significantly higher

proportion (76%) of HLSS youth identified the dual protection, avoid pregnancy and STI transmission (including HIV/AIDS), than the comparison youth (62%).

Practically all youth from both groups knew of at least one STI, with the primary difference between these two groups being that HLSS youth could identify significantly more types of STIs. The vast majority of both groups of youth identified HIV/AIDS; however 43% of HLSS youth identified three or more STIs compared to only 5% of youth in the comparison group. HLSS youth identified, in much greater rates than comparison youth, Hepatitis B, syphilis, gonorrhea, Chlamydia and herpes.

When asked to identify signs or symptoms of an STI, HLSS youth far exceed the youth in the comparison group. Only 43% of comparison youth could name an STI symptom, which was substantially lower than the 3 of every 4 (75%) HLSS youth who could. Furthermore, 30% of HLSS youth could identify three or more symptoms which, again, was significantly higher than the 6% of comparison youth. Specifically, more HLSS youth identified at much higher rates the symptoms of painful urination, sores and warts on the penis/vagina, loss of weight, and burning and itching in penis/vagina than youth in the comparison group.

There was no difference between HLSS and comparison youth on awareness of HIV/AIDS since virtually all youth are aware of HIV/AIDS. Regardless of gender, age or urban or rural location the vast majority of comparison (98%) and all (100%) HLSS youth had heard of HIV/AIDS.

Virtually all youth in both groups knew of at least one way HIV/AIDS is transmitted (sexual intercourse), yet again HLSS youth were able to identify substantially more modes of transmission than comparison youth. Thirteen percent of youth in the comparison group were able to identify three or more modes of HIV/AIDS transmission compared to 30% of HLSS youth. Comparison youth identified basically three modes, which in rank order were, sexual intercourse, blood transfusions and sharing needles. HLSS youth not only identified those modes but also identified at significantly higher rates modes such as mother-to-child during pregnancy/birth and breast feeding.

Disappointingly, 10% of HLSS youth identified casual contact with an HIV/AIDS infected person as a mode of HIV transmission, which was no different from the comparison youth.

There was no significant difference between the rates of HLSS and comparison youth who knew ways to avoid getting HIV/AIDS. That is, 90% of youth in the comparison group knew at least one way to avoid HIV/AIDS, using condoms, which was not significantly different from 98% of HLSS youth. The primary difference between these two groups of youth was that the HLSS youth had significantly higher rates of knowing more than one means of prevention. They identified avoiding sharing of needles as well as using condoms.

The majority of HLSS youth had heard of the ABCD Approach whereas the vast majority of comparison youth had not. Four of every five (81%) of HLSS youth said they had heard of the ABCD approach compared to only 2% of comparison youth. For those few youth in the comparison group who had heard of the ABCD Approach less than one-half could state the meaning of any one of the letters. As for the HLSS youth, over 90% of them successfully stated the meaning of all letters.

Overall, there were about as many non-significant as significant differences between the HLS and the comparison youth when examining KAP of reproductive health. Table 9 presents a summary of the findings.

Table 9: Summary of KAP differences between HLSS and MPS comparison youth.

KAP of Healthy Lifestyles and Reproductive Health*	MPS comparison	HLSS
Not significantly different:		
1. Smoke	13%	7%
2. Know at least 1 negative health consequence smoking	96%	100%
3. Drinking alcohol	68%	61%
4. Practice unhealthy lifestyle:		
Smoke or drink	57%	56%
Both smoke and drink	12%	6%
5. Know where to seek RH information	98%: gynecologist, mother, friends	98%: gynecologist, mother, friends
6. Know where to seek RH services	95%	98%
7. Most reliable sources of information on sexual relations	Gynecologist, mother, friends	Gynecologist, mother, friends
8. Had sexual intercourse	23%	15%
9. Used contraceptive at last intercourse	79%	73%
10. Contraceptive used	92%- condom	96%- condom
11. Source of contraceptive	Pharmacy	Pharmacy
12. Plan to use contraceptive first-time or next time they have sex	36%	30%
13. Know of HIV/AIDS	98%	100%
14. Identified "casual contact with and HIV/AIDS infected person" as a mode of HIV/AIDS transmission	8%	10%
15. Know at least 1 way to avoid HIV/AIDS	90%	98%
Significantly different:		
1. Know 3 or more negative health consequence smoking	Boys:10% Girls: 32%	Boys:47% Girls: 68%
2. Know 3 or more negative health consequence smoking	12%	33%
3. Negative consequences of drinking alcohol during pregnancy	16%	60%
4. Three of more signs of puberty	Boys: 32% Girls: 54%	Boys: 72% Girls: 90%
5. Sought information on sexual relations in the previous six months	59%	74%
6. Correctly know when a woman is most likely to become pregnant	25%	65%
7. Know 1 or more complications related to early pregnancy	75%	90%
8. Know adverse health consequences of having an abortion	70%	97%
9. Know 3 or more adverse health consequences of having an abortion	12%	43%
10. Know the modern contraceptive - Pill	61%	79%
11. Know the modern contraceptive – IUD	21%	38%
12. Know ways of having "safe sex"	77%	88%
13. Know 3 or more STIs	5%	43%
14. Know 3 or more symptoms of STIs	6%	30%
15. Know 3 or more modes of HIV/AIDS transmission	13%	30%
16. Heard of ABCD Approach	2%	81%

* Weighted data presented.

Case Studies

To supplement the statistical data collected in the surveys, three case studies were conducted. Each case is a youth or adult involved in the project selected to highlight four particular issues: early marriage, drug use, and school administrator's view of project.

And, the names of the people have been changed to protect the identity of the respondent.

Early Marriage

Nino met Guga at school and has been dating him for one year. They decided that they were ready to marry. Nino is 15 and Guga is 17 years of age. Nino was did not want to tell her parents, who should knew would disapprove. Also, she did not want hers and Guga's intention to marry to become

"public," so, Nino shared this secret only with her close friends, who defended her right to marry and encourage them to do so secretly.

> "*We have been going-out together for a year and we thought it was time to marry…. there was nothing to wait for. Our closest friends were encouraging us to marry secretly*" (Nino)

Despite hers and Guga's decision, and the encouragement of her friends, Nino was uncertain if marrying at her age was a good decision. Her favorite school subject was mathematics and she had always dreamed of becoming a lawyer. She was uncertain how her future plans would be affected by marrying now.

Also, she was very nervous about the negative reaction from her family, relatives and other close friends if she was to marry secretly. These doubts and worries affected both Nino and Guga.

> "*In spite of our decision, we were afraid of the reaction of our parents and people we were both close to. We were always worried and depressed*". (Nino)

Nino heard of a Healthy Lifestyles and Reproductive Health course that would be held at after school from her head teacher. The head teacher announced these were "additional lessons", not part of the regular school lessons.

> "*The head teacher told us about additional 6/7th lessons. We were not happy about the idea, as we thought they were going to conduct ordinary lessons so we didn't want to be bothered with more lessons. We thought they would be boring. But my friends and I decided to stay so as not to upset our teacher.*" (Nino)

Nino and her friends were surprised at how much they enjoyed the first lesson. So, they attend all the other sessions. Nino was also very pleased with the unusual and interesting format of trainings, in that games and competitions were used to teach and all youth were given many opportunities to express their opinions openly, without criticism or judgment. Nino found all the seminars very interesting and relevant for her life, especially the sessions about puberty and early marriage above all since she was currently facing this issue.

While attending these sessions, Nino was amazed with the approach and skills of the trainers, and was able to establish very open and friendly relations with them. In fact, she confided in one of the trainers about her worries to marry.

> "*Apparently, Nino and her boy friend had decided to run away and marry secretly, but after attending the seminar and after speaking with me, she realized all the risks involved in early marriage.*" (Healthy Lifestyles trainer)

After attending the sessions on healthy lifestyles, pregnancy and early marriage, Nino reassessed the values in her life. During these sessions, hearing what other youth were saying and the information she was learning, Nino starting thinking about her decision to marry and how it would affect other priorities she had, such as education, getting a profession, and fulfilling one of her dreams to become one of the best lawyers. She also thought about her great desire to travel so she could learn about the cultures and history of other countries. Nino wondered how she would accomplish a profession and travel if she married now, especially at 15 years of age.

Nino has postponed her decision to marry. Now instead of being depressed and worried, she feels more confident and openly speaks about this issue. Moreover, she was elected to be a "peer educator." As she knows, friends can have a profound impact on encouraging you what to do even though their advice may not be in your best interest. Nino now knows this very well; therefore, she wants to learn more about healthy lifestyles and reproductive health so she can provide the best advice she can in her new role as a "peer educator."

Drug Use

Shako was five or six years old when his father sent his mother a "letter" that made her extremely upset. Since his mother received this letter she was never the same; thus, Shako decided to take revenge on his father. One morning he took a knife from the kitchen, took the 15 Lari he found in his mother's purse, and left home in search for his father to take his revenge. During his search for his father he met someone.

> "*I met another boy in the street. One day he told me, "Come with me, I'll tell you something" so I went with him. He told me, "I'll teach you something you will like, have you got any money?" I gave him the 15 Lari I had taken from my mother. He took this and bought two bottles of glue, four bags, and a little food. Together we went to a construction site where there were no people. He poured glue into the bag and we inhaled it.*" (Shako)

Shako began sniffing glue regularly to the point that he became addicted at 10 years of age. He supported this addiction by robbing people. It was not long before he was arrested for robbery, vagrancy and drug addiction. He could not be placed in the custody of his father who had abandoned him or with his mother who was not involved in "an immoral life." So, Shako was sent to a school for troubled and problem youth.

While at this school for troubled youth, he heard about the "Healthy Lifestyle and Reproductive Health of Adolescents" program that would be held. At the beginning Shako and his friends didn't like the idea of attending seminars on topics that were boring. Nonetheless, Shako and his friends attended.

> "*A group of trainers came to our school and told about the lectures they would give on healthy lifestyles. Initially, my friends and I thought these trainers would tell us the same things our teachers tell us….tobacco will cause disease in your lungs and you will end with tuberculosis, drugs will kill your brain cells, etc.. Hence the seminars seemed like they would be very boring. We went to the lectures just to show respect to the guests.* (Shako)

Shako became interested in all topics presented because he heard about things that were unknown to him before. He was especially interested in HIV/AIDS. In his five years at this school he had never heard anyone discuss or explain HIV/AIDS.

> "HIV/*AIDS is so real nowadays that a person can risk his entire life if not informed about it and how to prevent it. Life is so short; I don't want to spend it diseased.*" (Shako)

Many say, as well as Shako himself, that the program had a great effect on him. His bad habits have radically changed. He has stopped smoking, doesn't drink, and says he no longer inhales glue. The school officials say that he encourages other youth not to smoke.

Despite Shako's desire to change his life, he is still somewhat pessimistic about his own future, since he has no family to rely on. He knows he can not stay in this school forever and must one day leave. He knows he will be difficult but he hopes he can at least help other troubled youth once he does leave.

> *"I have had both "good" and "bad" experiences. If a child my age gets addicted to inhaling glue, he must get help like I got at this school otherwise his body and brain will demand more and more toxic substances. I will try to persuade them and share my knowledge.*" (Shako)

School Administrators and Parents

School Director and Deputy Director

School Director, Natia, made the decision to allow the Healthy Lifestyles and Reproductive Health sessions to be conducted after school hours. From the very beginning she was positive about the program. The only hesitation she had was the unusual and taboo topic of the trainings. Natia feared what reactions the students would have, as well as the teachers and parents on these topics. She admits

that she was especially concerned about the effect speaking so openly on reproductive health issues would have on the boys.

> *"I am always very careful with every new project, whatever positive aspects it may seem to have. There are many people who rely on me to make the right decisions – teachers, pupils and parents. I must consider the best interest of them all. Since the topic of trainings was unusual, I couldn't predict the reactions of the students and their parents. I didn't know the attitudes of trainers. I was especially afraid of how it would affect the boys…that is, how would this type of information be presented to them?"* (Natia, School Director)

Natia was pleased that parents and teachers didn't have negative attitude towards the program and didn't resist it being conducted. However, parents and teachers qualified their approval by insisting on attending some the trainings to learn about the exact topics that would be discussed and what information would be taught. Natia agreed and the Healthy Lifestyles sessions were conducted.

Natia, and her Deputy Director, thought the format of the sessions was well suited for this age group. Students learned healthy lifestyles and reproductive health through games and interactive methods, which included winning prizes. Moreover, students were encouraged to express their thoughts, feelings, and ideas. Through all this, students were engaged and very involved with the topics, both of which Natia believes increased the knowledge and retention.

In addition, such a format help make a taboo topic, something they discussed secretly among only a few friends, into something they discussed and expressed their opinions about forcefully. At the end of the course, students expressed that these topics should not be taboo but rather it is necessary to speak about these topics openly. And, with such topics being discussed openly, students felt that they don't have to look for "answers" on the street anymore, now they can discuss these issues openly with their peers as well as with adults.

> *"Students became more open, they got rid of many of their complexes, e.g. of talking about sex relations loudly. They are very confident in themselves as they have learned many new things about the negative habits and their applications."*(Nika, Deputy Director)

Natia emphasizes the importance of the session trainers. To her, she feels that one success of the program is that the trainers were competent in the topics, made the students feel as if they were just an "older" peer, and took the time to listen to student concerns and opinions.

> *"I don't think the trainer must be a teacher, as children will not get similar information from the teacher so openly. The barrier between the teacher and the pupil is still very big."* (School Director)

According to Natia and Nika, children of puberty-age are especially interested in these issues and very often get incorrect information from friends or other kids in the street. Simply being unaware of the many negative health consequences contributes to alcoholism, drug addiction and sexually transmitted infections among adolescents. They believe these topics are important for this age group as they are beginning to form their attitudes and behaviors toward smoking, drinking, drug use and sex.

Natia thinks that children should receive information on the harmful effects of tobacco and alcohol beginning in the 8th form. Nika, the Deputy Director, has the same opinion; he thinks that these kinds of programs will be the precondition for adolescents to avoid bad habits.

> *"Students before 8th form must get information on alcoholism and cigarettes. How [do they get this information], by the adults they observe!*" (Natia)

Besides tobacco and alcohol, both Natia and Nika feel that the issue of sexually transmitted infections (STIs) is especially important for adolescents. STIs, such as HIV/AIDS, are a serious danger as it spreads very quickly and threatens life itself.

> "*Special attention must be paid to the sexually transmitted infections, namely HIV/AIDS, which is a great danger today. In my opinion, children must be informed of this disease by 8th form, as 13-year*

old child is at the puberty age and is actively interested in sexual relationships." (School Director, Natia)

and

"HIV/*AIDS is the most important issue, it is the disease that cannot be cured and causes fatal results.*" (Nika, Deputy Director)

After the Healthy Lifestyles sessions, Natia said that the school management committee decided to introduce healthy lifestyles topic into the first form. Students in the first form have now begun expressing their ideas of a healthy lifestyle through art. For older students, topics will be selected, such as HIV/AIDS, in which groups will debate various aspects. Finally, students will be identified and recruited who will become Peer Educators in the school.

Parents

One parent, Nana, fears like many other parents that teaching reproductive health issues at an early age will make youth more interested in sex life and they may start sexual relations too early.

> "*I have a fear that trainings, especially on sexual relationships and contraception, might interest the youth at a very early age. I think it is better to teach them these issues in the 11th form or at the student period.*" (Nana, Parent)

For her, youth are attracted to drugs, alcohol and tobacco, which should be emphasized. For many youth, their status among their peers is based on smoking and drinking, and sometimes drug use. Often too, youth get involved with these behaviors as a form of rebellion against parents, and thus, having the school help with discouraging this behavior is greatly appreciated.

Nana remembers her children and their friends after one healthy lifestyle session which involved a performance they watch and participated in as well.

> *"After the performance, the children came home very happy, they spoke with each other about the things they saw or heard. The discussions were very good. If someone told them that drugs are bad, they wouldn't be so affected as with this performance, which caused more interest in healthy lifestyle issues than trainings."* (Nana)

To her, these kinds of activities will be even more effective for youth than lectures, readings, and tests.

Interestingly, Nana reflected about sessions on healthy lifestyles and reproductive health for only the youth. To her, parents play an important role in informing their children, not just the school. In her opinion, children must get the basic information at home. But then she thought,

> *"To my mind, these types of programs should also consider holding courses for the parents since, often, parents don't know about healthy lifestyles. When a parent is well in formed about these issues, the child will be more educated."* (Nana)

HWG's Progress on Indicators Toward Targets

Table 10 presents the twenty-two indicators for the BCC component established at the beginning of the HWG project. After the BLS was conducted end-of-the-project (end-line) targets were established based on what would be feasibly possible given the original three years of implementation. With the extension of the project, the MPS provides an indication of progress toward the end-line targets.

Of the 22 indicators, their status toward end-line targets at the project's mid-point is the following: 9 (or 41%) have been achieved, 5 (23%) have a good chance of being achieved, and 8 (or 36%) will be a challenge to meet by the end of the project.

The indicators that need the most attention and effort are those dealing with the ABCD Approach, correct sources for reproductive health information, counseling and services, and knowledge about STI symptoms and means of transmission.

Table 10: HWG's indicators, results and targets.

Indicator	Base-line (Nov. 04)	Mid-point (May 2006)	End-line targets for all youth	Status
General Indicators for Adolescents:				
% adolescents who know sources of RH information, counseling and services.				
% adolescents who know 2 or more correct sources to obtain RH information (gyn/dr, mother, father, nurse/midwife)	27%	33%	**45%**	Achievable
% adolescents who know 2 or more correct sources to obtain RH counseling (mother, gyn, father, midwife/nurse).	33%	38%	**50%**	Challenge
% adolescents who know 2 or more correct sources to obtain RH services (clinic, maternity hospital, ambulatory, women's consultation centers, RH cabinet, tel hotline)	26%	28%	**45%**	Challenge
Healthy Habits:				
% adolescents with healthy habits (as a composite indicator consisting of no smoking and alcohol consumption).	23%	32%	**35%**	Achievable
% adolescents who know three or more harmful consequences of smoking.				
% of boys who know three or more harmful consequences of smoking.	2%	10%	**20%**	Challenge
% of girls who know three or more harmful consequences of smoking.	7%	32%	**25%**	**Achieved**
%adolescents who know three or more harmful consequences of alcohol consumption.	4%	12%	**18%**	Achievable
% adolescents who know three or more harmful consequences of alcohol consumption during pregnancy.	8%	16%	**25%**	Achievable
Puberty:				
% adolescents knowing at least 3 normal signs of puberty.				
% girls knowing 3 normal signs of puberty among girls.	14%	24%	**35%**	Achievable
% boys knowing 3 normal signs of puberty among boys.	0%	13%	**10%**	**Achieved**
% adolescents who know when pregnancy most likely can occur.	6%	10%	**15%**	Challenge
% adolescents who can identify at least 3 methods of modern contraception.	9%	19%	**18%**	**Achieved**
% adolescents on three or more possible consequences of abortion.	5%	12%	**10%**	**Achieved**
% adolescents who know the dual (two) protection provided by condom.	32%	68%	**50%**	**Achieved**
STIs, and RTI HIV/AIDS				
% adolescents who know about three or more forms of STI.	3%	5%	**10%**	Challenge
% adolescents who know three or more symptoms of STI.	1%	7%	**7%**	**Achieved**
%adolescents who know about three or more different ways of STI transmission.	0%	2%	**7%**	Challenge
% adolescents who know about HIV and AIDS.	98%	98%	**80%**	**Achieved**
% adolescents who know about different ways of HIV transmission.				
% adolescents who know three or more ways of HIV transmission.	13%	30%	**24%**	**Achieved**
% adolescents who know three or more ways to avoid getting HIV/AIDS.	6%	18%	**15%**	**Achieved**
% adolescents who can define A-B-C-D approach.				
% adolescents who have heard of the A-B-C-D approach	0%	2%	**7%**	Challenge
*% adolescents who have heard of A-B-C-D approach & can correctly identify the meaning of **all** the letters*	0%	9%	**30%**	Challenge

Summary and Discussion

The summary and conclusions will be based on the five goals of the study and this report. The five goals were, a) what were the levels of KAP among youth about reproductive health at the beginning of the project, b) had these levels changed significantly, especially in the desired direction by project mid-point, c) did youth who attended the project's HLS have significantly higher levels of KAP than youth in the

general population at the mid-point survey, d) what is the status of the project's BCC indicators toward end of the project targets, and e) what has been the impact of the project on selected individuals?

Goal 1 & 2: For the sake of brevity, goals 1 (BLS results) and 2 (% point change at MPS) will be combined and those findings considered to be the most essential will be discussed.

Knowledge:

By and large, youth 15 to 17 years of age in these districts are not married nor engaged to be married. RH topics such as family planning and consequences of early marriage can therefore play an important role in early awareness and prevention. Moreover, both the BLS and MPS show that there are few formally organized sessions or activities addressing these issues in these districts.

Although the majority these youth are not married or engaged, about 1 of every 5 youth in both surveys reported having sex, especially boys. This situation highlights the importance of actively promoting knowledge and awareness of safe sex practices. Very few girls reported having sex, and none of them reported using contraception.

Not surprisingly, more boys than girls reported smoking; about 25% of boys and 2% of girls. The level of knowledge regarding the negative health consequences of smoking seems to be relatively high among youth, especially of pulmonary disease. By the MPS, boys had increasingly learned about the harmful consequences of cancer and pre-mature dying, whereas more girls increased their awareness about cancer and pregnancy complications. Subsequently, youth learned more negative health consequences of smoking, but the same percentage of youth smoked at the MPS despite knowing more adverse health consequences of smoking.

The percentage of boys who consume alcohol slightly increased over this period of time (76% to 85%), whereas for girls there was a significant decrease (72% to 51%). During this time there was an increase in knowledge of adverse health consequences of drinking alcohol. In the BLS study, almost 1 of every 4 youth could not identify a negative consequence of drinking alcohol, declining significantly to less than 1 of every 10 youth in the MPS survey. Furthermore, there was a significant increase in the percentage of youth who could cite two or more negative consequences of drinking alcohol; from 17% in 2004 to 42% in 2006. Again, despite this increased knowledge, there as no significant reduction in the proportion of boys consuming alcohol, although there was for girls.

At the MPS, there was an increase in knowledge of negative health consequences of drinking alcohol during pregnancy. Perhaps with the increase in knowledge of adverse health effects of drinking in general, and during pregnancy, may together account for some of the reduction in the proportion of girls drinking alcohol by MPS.

The majority of girls and boys in the general population remain uncertain when a woman is most likely to become pregnant. When asked what time during a woman's monthly cycle she has the greatest likelihood of becoming pregnant, in 2006 almost one-half (54%) of all youth said they did not know, which was not significantly different than the percentage of youth who did not know in 2004 (60%). Moreover, at MPS, the majority (26%) of youth that did state that they "knew" actually stated an incorrect time (right after her period has ended). This RH message and how it is communication need to be reviewed if an increase is expected by the end of the project.

Significantly more youth were able to identify dangerous health consequences of having an abortion in 2006 than did in 2004. One-half (50%) of youth did not know any health consequences of having an aborting at BLS declining to nearly one-third (30%) at MPS. With abortions readily available, and at relatively affordable prices, and with abortion being a widely accepted form of contraception during the Soviet period, this is a promising sign if it will affect behavior.

Moreover, there was a considerable increase in the percentage of youth knowing modern methods of contraception. Slightly more than 1 in 3 youth (38%) did not know of one contraceptive in 2004 decreasing to 1 of every 10 youth (7%) in 2006.

In both studies, the vast majority of youth know of HIV/AIDS; however, even at the MPS only small percentages of youth are knowledgeable about other STIs (24%), Hepatitis B (10%) and gonorrhea (6%). When youth are knowledgeable about STIs, it is primarily boys. In addition, boys more than girls increased their knowledge about symptoms of STIs, although both rates of knowing at least one symptom were quite low (57% of boys and 28% of girls). With the higher rate of boys reporting to have sex, they are more likely to be aware of STIs and accompanying symptoms than girls. Nonetheless, a greater effort needs to be placed in increasing knowledge of STIs among girls.

Almost all youth know of HIV/AIDS and at least one mode of transmission (sexual intercourse) of HIV/AIDS in both studies. However, knowledge of the most common mode of transmission of HIV/AIDS in Georgia today, "sharing needles," is still relatively low among youth (42% in 2002 and 48% in 2006).

There was a significantly increase in the percentage of youth knowing what "safe sex" means as well as a greater percentage knowing two or more ways of having "safe sex." In 2004 slightly more than one-half (56%) of youth did not know what "safe sex" meant decreasing significantly to nearly one-quarter (23%) of youth in 2006. The largest increases in knowledge of "safe sex" were a) use of condoms and b) avoid sex with prostitutes. Other methods, such as avoiding multiple sex partners or abstaining from sex, were rarely mentioned by youth.

Attitudes:

Overall, friends increased as an important source of information on RH issues for youth. In the BLS 6% of youth cited friends as a source of information on general reproductive health issue increasing to 29% at the MPS. This is not too unusual in that youth at this age spend considerable amount of time with each other and discuss RH with each other. The increasing importance of friends among youth as a source of RH information underscores the importance of well informed, and trusted, Peer Educators as a strategy to ensure youth are received correct RH information.

More specifically, girls who sought information specifically about sexual relations in the previous six months did so from friends, in 2004 and 2006, and increasingly more from their mothers in 2006. However, boys sought this information primarily from friends, in 2004 and 2006, and increasingly more from magazines and TV in 2006. Therefore Peer Educators are an effective strategy for both girls and boys. Also, this highlights differences between boys and girls when they seek sensitive RH questions (i.e., sexual relations); boys are increasingly seeking this type of information from "mass media" and girls from their mothers. Thus, for boys, Peer Educators should reinforce their RH information with hand-outs such as brochures, pamphlet and magazines. For girls, RH information should be reinforced through Peer Educators as well as classes for mother on how to talk with their daughters about RH issues.
Among all youth gynecologist are not readily cited as reliable sources of information on RH issues. These studies did not ask the youth why, which needs to be examined.

Overwhelmingly, condoms are the known and preferred form of contraceptive used by youth. Condoms are primarily obtained at a local pharmacy.

When asked if they plan on using a contraceptive the first time---or next time---they have sex, the vast majority of girls say they have not thought about it or they do not plan on using a contraceptive, which is quite different than boys. Slightly more than three-quarters of the girls reported that they had not thought about using a contraceptive at first sex or the next time they have sex, compared to one-fifth of boys. Moreover, the next largest percentage (10%) of girls responded, "I do not plan on using a contraceptive" compared to 7% of boys. Again, this highlights different attitudes of boys and girls on the use of contraceptives. For boys, having sex outside a long-term relationship is more "accepted" than for girls, thus, contraceptives are needed for dual protection from pregnancy and STIs. Whereas for girls, sex outside a long-term relationship is not generally accepted, and thus, use of a contraceptive is not needed because pregnancy is desired and "trust" of your partner does not warrant protection from STIs.

Practices (behaviors)

As for behaviors, there were no overall significant changes detected among youth in the prevalence of smoking, drinking of alcohol, or having sex.

In summary, the greatest number of changes among youth from the BLS to the MPS occurred in knowledge, with few changes in attitudes, and no changes in behaviors that were measured. Not surprising, these findings support many other studies that indicate that of the three, knowledge is the easiest to change, attitudes being more difficult, and behaviors being the most difficult of the three.

Goal 3. Do MPS results of youth indicate potential achievement of the end-line targets established for the indicators?

Slightly less than one-half (41%) of the project indicator targets have been accomplished and another one-quarter (23%) are possible to reach by the end of the project. These indicators primarily are knowledge-based indicators. Most likely, about one-third (36%) of the indicators will not be accomplished, which are about specific RH approaches (ABCD) and behaviors such as where RH counseling information and services are obtained.

Goal 4. Do youth who have attended the Healthy Lifestyles Sessions (HLS) have significantly higher levels of KAP on healthy lifestyles and reproductive health than comparison youth from the general population?

Knowledge

There were do significant differences between youth who attended HLS and youth who had not in knowing at least one negative health consequence of smoking or drinking alcohol, but HLS youth could significantly identify more negative consequences of smoking and drinking alcohol than comparison youth. Nevertheless, there was not significant difference between HLS and comparison youth in the prevalence of smoking or drinking alcohol.

Among the most significant impact the HLS had in increasing knowledge among youth, when compared to youth in the general population, were the following:

- puberty
- complications related to early pregnancy
- methods of modern contraception
- when a woman is most likely to become pregnant
- adverse health effects of having an abortion
- the meaning of "safe sex"
- various STIs and their symptoms
- various modes HIV/AIDS is transmitted
- the ABCD Approach to a healthy lifestyle

The RH issues in which the HLS did not appear to have any impact on knowledge among attending youth were:

- where to seek information on reproductive health
- believe incorrectly that casual contact with an HIV/AIDS infected person is mode of HIV/AIDS transmission.

Attitudes

When examining various RH attitudes, after attending HLS the attitudes of participants were not unlike attitudes of the non-participating comparison youth, specifically in:

- seeking information on sexual relations from basically the sources

- considering these same sources as reliable
- whether they will use contraceptives the first time---or next time---they have sex.

Practices

Although the HLS dramatically increased participants knowledge on RH and healthy lifestyle choices, there were not significant differences between HLS participants and comparison youth on:

- the prevalence of smoking
- the prevalence of drinking alcohol
- the prevalence of smoking and drinking alcohol.

Goal 5. What has been the impact of the project on selected individuals who have been involved in the project?

For the Nina, Guga and Shako, the HWG project has impacted their lives in many ways. Most importantly, they express that the due to the project staff coming to them, in their schools, they felt compelled to attend the HLS course, but once they did, how much it affected their lives. Without direct intervention into a major aspect of their lives, schooling, reaching youth will be limited.

Moreover, the relationship between the HLS trainers and Peer Educators and youth is vital. As the data indicate, friends are a primary source of information for youth on RH issues. Nino, Guga and Shako viewed the HLS trainers as a "friend", but more importantly, an informed friend.

The HLS sessions also lowered many of the barriers and taboos these youth felt about discussing their concerns or problems. It also provided them with knowledge about options to early marriage, abortion and peer pressure. Another, and perhaps the greatest impact, is that these youth express their desire to be an informed "friend" to others. Finally, one impact beyond just these youth, there is now a more open atmosphere among youth and adults to discuss formerly taboo topics.

School staff, and parents, were concerned at first but after seeing the sensitivity of how the topics are handled, and the youth friendly format of the learning process through fun activities and prizes, they were quite positive about the HLS. The adults view the youth becoming much more confident in themselves and handling former taboo topics, such as alcoholism, drug addiction and STIs. The school administrators would like to see HLS become formalized into the school curriculum, and parents, hope to have a version of HLS designed for them.

Recommendations

- Listening to the radio is common among the vast majority of youth and is a cheap and effective means of communication. Moreover, many youth mentioned that other mass media (TV, radio, magazines) are primary sources of information about RH. Thus, mass media communication should continue. More specifically, from 2004 to 2006, there has been a shift from listening to Fortuna Plus and Imedi radio stations to *Ar Daidardo* station, which may mean a shift in HWG radio programs and spots.
- Friends have increasingly become a main source of RH health information regardless of gender, age or location. Therefore, the outreach strategy of well-informed and accepted Peer Educators needs to be strengthened and expanded.
- A small percentage of girls reported having sexual intercourse; however when they did none of them used contraception. And, the many girls were undecided if they would use contraception the first time, or next time, they had sex. Perhaps more positive messages of FP need to be included in the HLS, such achieving high education and having more income and savings for child health care cost that delaying pregnancy may provide.
- Overall, there was a substantial increase in the knowledge among youth of negative consequences of smoking. Nonetheless, those youth who knew many more negative consequences of smoking were as

likely to smoke as youth who knew few. Perhaps some "positive" messages about not smoking (e.g., having more spendable cash for other things) should be emphasized. Nonetheless, more than likely changes smoking behavior in a larger percentage of youth will take more time and effort than one project.

- A substantially greater percentage of girls reported drinking alcohol than smoking. Is this "real" or just an "artifact" due to stigma associated with smoking than drinking alcohol for girls? More qualitative methods (i.e., focus groups) may be needed to determine this.

- As shown in the 2005 Reproductive Health Study pharmacists are the main providers of contraceptives in Georgia; however, most are untrained in contraceptive counseling. Likewise, in this study, most youth view pharmacist as the main provider of contraceptives. The Youth Friendly Pharmacy component will need to focus not only on services to youth, such as access and privacy, but also ensure those pharmacists are trained in providing youth-appropriate advice and counseling.

- The Telephone Hotline service is known by almost 40% of all youth in 2006 in these two districts, but only 4% reported using service; the percentage of HLS participants who used the Hotline service is about double (9%). The project should evaluate whether, after 2 years, if this rate of knowledge and use of the Hotline service is satisfactory. The usage rate seems to be low and no youth in rural areas reported using the service. Those few youth who did use the service evaluated it highly, thus the low use most likely is not related to quality. The project should undertake a study to determine if this relatively low usage is due to some barriers, such as access (e.g., poor connection or busy lines) or stigma (e.g., fear of voice being recognized).

Appendix 1: Data Tables for BLS, MPS & HLSS Surveys

The following tables are for data from the BLS (baseline survey) in 2004 and the MPS (mid-point survey) in 2006. The HLSS (healthy lifestyle session survey) data are highlighted.

Youth Characteristics

Table 11: Sample sizes for the BLS and MPS of the HWG Project by district, urban/rural location, age & gender.

			Boy		**Girl**		**Total**		
District	**Location**	**Age**	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Kutaisi	Urban	15yrs	42	69	46	65	88	134	49
		16yrs	52	70	51	66	103	136	36
		17yrs	47	68	50	63	97	131	32
		Total	141	207	147	194	288	401	117
Zestaponi	Urban	15yrs	7	8	8	8	15	16	2
		16yrs	8	8	7	10	15	18	17
		17yrs	8	10	7	8	15	18	12
		Total	23	26	22	26	45	52	31
	Rural	15yrs	9	17	6	15	15	32	5
		16yrs	6	17	10	16	16	33	20
		17yrs	8	15	10	13	18	28	27
		Total	23	49	26	44	49	93	52
Overall totals			**187**	**282**	**195**	**264**	**382**	**546**	**200**

Table 12: Highest level of education of parents.

Level of Education*	Father				Mother				Total			
	Urban		Rural		Urban		Rural		Father		Mother	
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS
Not present	0.0	4.0	0.0	3.2	0.0	0.2	0.0	0.0	0.0	3.8	0.0	0.2
Incomplete secondary	0.6	1.6	0.0	0.0	1.1	1.8	0.7	0.0	0.7	1.3	1.2	1.5
General secondary	29.2	22.4	57.5	55.5	32.6	21.1	68.0	53.2	33.7	27.9	34.6	26.4
Special technical	14.2	12.1	25.6	10.7	13.6	10.4	20.0	12.1	18.2	11.8	17.3	10.7
Specialized secondary	7.6	6.2	1.6	7.7	13.1	5.4	4.5	4.4	7.2	6.4	11.5	5.2
Incomplete university	0.0	4.0	0.0	2.1	0.5	8.2	0.0	3.3	0.2	3.7	0.4	7.4
Completed university	38.1	49.9	15.3	20.8	37.3	52.9	7.4	27.0	39.3	45.0	34.1	48.6
Don't know	0.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.7	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Weighted data presented.

Table 13: Selected characteristics of youth.

Characteristics*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Average # adults in house	2.7	3.0	2.6	3.1	2.7	3.0	2.6	3.0	2.8	3.0	2.6	2.9	3.2	3.3	2.7	3.1	3.0
Plan on attending university or technical education	85.7	85.8	96.9	93.4	89.0	91.1	93.3	88.2	88.5	88.7	91.3	90.4	83.7	84.6	90.3	89.5	97.0
Married	0.0	0.7	0.0	1.2	0.0	0.6	0.0	1.6	0.0	0.6	0.0	1.1	0.0	0.0	0.0	0.9	0.0
Engaged	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0

*Weighted data presented.

Table 14: Radio station most listened to.

Radio Stations*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
I don't listen	19.6	12.4	7.1	18.9	15.1	17.1	13.6	12.7	10.4	17.0	12.1	15.7	12.1	13.3	13.3	15.5	10.5
Don't have radio	0.0	0.0	0.9	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Don't know	4.5	0.6	2.3	0.3	2.5	1.0	3.8	0.5	3.9	0.0	2.9	0.4	9.2	1.0	3.4	0.5	0.0
Fortuna Plus	33.1	28.8	45.1	26.5	38.4	25.7	37.4	29.0	42.5	28.3	40.4	28.4	23.8	20.1	39.1	27.7	28.5
Fortuna	7.1	12.0	8.1	10.8	8.6	12.8	8.7	11.8	4.5	9.5	7.6	10.8	7.6	17.2	7.6	11.4	11.5
Dzveli khalakhi	4.9	0.0	8.0	0.0	7.1	0.0	6.5	0.0	5.6	0.0	6.8	0.0	2.5	0.0	6.5	0.0	0.0
Iverioni	15.3	0.0	13.1	0.0	13.1	0.0	16.2	0.0	12.5	0.0	15.2	0.0	2.9	0.0	14.2	0.0	0.0
Imedi	8.0	6.0	9.8	3.4	6.5	5.1	7.5	4.9	14.2	3.9	6.3	3.4	39.8	11.5	8.9	4.8	3.0
Ar daidardo	0.4	25.5	0.0	24.4	0.0	21.4	0.0	24.5	0.9	29.2	0.2	22.5	0.0	33.8	0.2	25.0	25.5
Other	7.1	14.6	7.6	15.4	7.9	17.9	6.3	17.6	4.8	13.1	8.0	19.2	2.1	3.1	0.9	15.1	20.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Weighted data presented.

Table 15: Have you attended in the 6 months any classes, sessions or other meetings where issues of reproductive health were discussed?

Attended classes*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Yes	9.6	5.7	13.3	14.0	12.7	8.7	11.5	10.7	9.4	9.5	10.0	8.5	68.3	15.2	11.4	9.6	N/A
No	90.4	94.3	86.7	86.0	87.3	91.3	88.4	89.3	90.6	90.5	90.0	91.5	30.8	84.8	88.5	90.4	N/A
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.1	0.0	N/A
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	N/A

*Weighted data presented.
N/A – not asked

Table 16: What topics of reproductive health were discussed?

Topics discussed*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't remember	21.6	12.4	5.1	8.1	7.2	18.9	23.5	0.0	0.0	12.1	14.0	7.5	0.0	14.8	11.9	9.4	N/A
Healthy habits	57.8	81.3	62.0	70.2	61.8	81.1	62.3	79.8	53.5	58.9	54.9	76.9	90.9	64.5	60.3	73.6	N/A
HIV/AIDS	32.9	25.4	27.4	35.6	31.1	19.0	29.0	45.4	28.0	29.3	34.4	41.6	2.9	7.3	29.7	32.5	N/A
Puberty	0.0	0.0	22.5	16.4	14.3	6.1	14.3	15.2	9.0	11.7	15.5	15.5	0.0	0.0	13.2	11.4	N/A
Sexually transmitted infections	14.0	6.4	10.9	19.0	2.3	19.0	15.0	10.1	26.9	17.6	12.9	20.6	8.3	0.0	12.2	15.1	N/A
Reproductive health of adolescents	n/a	0.0	n/a	2.7	n/a	0.0	n/a	0.0	n/a	5.9	n/a	2.5	n/a	0.0	n/a	1.9	N/A
Early marriage/pregnancy**	6.9	6.3	8.2	5.4	9.6	0.0	0.0	4.9	18.0	11.8	7.8	5.1	6.7	7.3	7.6	5.6	N/A
Other	0.0	6.3	8.4	7.7	0.0	0.0	7.1	4.9	10.7	17.1	5.4	2.5	2.4	20.7	4.9	7.3	N/A

* Weighted data presented.
** In BLS survey this topic consisted of two separate responses: a) family planning, contraception, abortion b) marriage or responsible parenthood.
N/A – not asked

Healthy Lifestyles

Smoking

Table 17: Do you smoke? If yes, how many cigarettes do you smoke per day?

Frequency of Smoking*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Never smoked	63.8	57.1	96.7	92.8	85.7	81.3	79.8	77.5	73.6	63.4	80.8	73.8	66.1	76.4	80.1	74.2	84.0
Have smoked but quit	10.6	20.2	1.9	6.0	3.5	12.6	9.4	11.2	5.3	16.5	6.1	13.9	9.1	10.6	5.8	13.4	9.5
Less than 5 cigarettes a day	9.6	4.6	0.8	0.8	5.5	1.1	5.0	3.2	4.8	4.0	4.9	2.5	12.8	4.4	5.2	2.8	2.0
Between 6-9 cigarettes a day	5.6	8.2	0.0	0.0	2.7	2.2	1.6	4.3	4.4	6.3	2.8	4.0	0.0	5.4	2.6	4.2	2.5
More that 10 cigarettes a day	9.2	10.0	0.0	0.4	1.5	2.8	3.3	3.8	11.0	9.8	4.4	5.8	9.0	3.3	5.2	5.4	2.0
No answer	1.3	0.0	0.6	0.0	1.1	0.0	0.8	0.0	0.8	0.0	0.9	0.0	3.0	0.0	1.0	0.0	0.0

* Weighted data presented.

Table 18: Negative health consequences of smoking – boys. (multiple response)

Negative consequences*	Age						Location				Total		
	15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
No negative effects	0.0	1.1	0.0	1.1	3.4	0.6	0.9	1.3	0.0	0.0	0.9	1.1	0.0
Don't know	14.2	5.2	4.9	2.1	10.7	1.1	10.0	2.1	0.0	8.1	9.7	3.1	0.0
Pulmonary disease	67.4	70.2	69.3	72.6	66.6	69.0	68.6	70.9	43.1	69.3	67.9	70.6	85.1
Cardiovascular disease	23.3	23.4	33.3	29.5	22.9	38.7	26.9	29.6	32.5	34.9	27.1	30.5	62.1
Cancer	11.3	36.3	16.7	35.8	16.6	42.0	14.1	41.2	35.3	22.4	14.7	38.0	52.9
Decreased sexual performance	6.7	1.0	5.2	2.1	7.3	3.2	6.0	1.7	16.3	4.0	6.3	2.1	9.2
Pre-mature dying	1.9	13.7	1.9	14.7	0.0	22.4	1.4	17.5	0.0	14.2	1.4	16.9	14.9
Increase in peptic ulcers	0.0	0.0	1.6	0.6	0.0	0.8	0.6	0.4	0.0	0.0	0.6	0.4	10.3
Increased facial wrinkles	0.0	1.1	0.0	0.0	0.0	1.1	0.0	0.9	0.0	0.0	0.0	0.7	8.5

* Weighted data presented.

Table 19: Number of negative health consequences of smoking known by boys.**

	Percent		
Number negative effects known*	BLS	MPS	HLSS
No negative consequences known	10.6	6.3	0.0
1 known	60.4	38.7	13.8
2 known	24.2	44.7	39.1
3 known	4.8	9.9	39.1
4 known	0.0	0.4	8.0
Total	100.0	100.0	100.0
Average	**1.2**	**1.6**	**2.4**

* Weighted data presented.
** The response, "other" is not included because not certain if correct.

Table 20: Negative health consequences of smoking – girls. (multiple response)

Negative consequences*	Age						Location				Total		
	15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
No negative effects	0.0	1.1	1.0	0.0	0.0	1.2	0.0	0.9	0.0	0.0	0.0	0.7	0.0
Don't know	2.3	2.3	0.0	7.4	0.3	4.8	0.7	4.9	12.6	4.8	1.0	4.9	0.9
Pulmonary disease	79.6	72.9	89.9	78.4	82.2	69.1	84.1	73.1	80.9	77.0	84.0	73.7	79.6
Cardiovascular disease	30.2	36.2	49.8	48.0	31.5	38.0	37.8	41.4	34.2	39.1	37.7	41.0	61.1
Pregnancy complications	4.1	22.2	5.5	27.9	19.1	31.0	8.2	30.1	13.5	11.4	8.4	27.0	32.7
Cancer	7.7	23.2	6.9	26.0	5.4	21.4	6.7	23.7	9.0	27.8	6.8	24.4	45.1
Increased risk of conception delay	2.1	7.7	3.8	14.2	14.5	22.7	5.9	17.2	0.0	2.2	5.8	14.7	25.7
Pre-mature dying	5.6	14.0	6.7	14.1	3.5	10.7	5.5	11.4	2.3	21.1	5.5	13.0	20.4
May alter menstrual function	5.3	0.0	0.0	5.0	1.9	3.0	2.5	2.3	2.3	2.3	2.5	2.3	3.5
Increased facial wrinkling	2.1	10.2	5.5	14.3	3.3	12.0	3.7	12.8	0.0	9.3	3.6	12.2	30.1
Increase in peptic ulcers	3.5	1.2	5.1	6.6	0.2	4.8	3.3	4.2	4.3	4.5	3.3	4.3	20.4
More pain during menstruation	0.0	2.3	0.0	0.0	0.0	1.2	0.0	1.4	0.0	0.0	0.0	1.1	15.0
Other	0.0	42.1	1.7	23.1	1.7	21.7	1.1	24.1	0.0	53.1	1.0	28.9	13.6

* Weighted data presented.

Table 21: Number of negative health consequences of smoking known by girls.**

Number known*	Percent		
	BLS	MPS	HLSS
No negative consequences known	2.0	7.9	2.7
1 known	45.8	26.9	8.0
2 known	44.9	33.3	21.2
3 known	7.3	15.2	24.8
4 + known	0.0	16.7	43.3
Total	100.0	100.0	100.0
Average	**1.6**	**2.2**	**3.4**

* Weighted data presented.
** The response, "other", is not included because not certain if correct.

Alcohol

Table 22: Frequency of consuming alcohol.

Frequency consuming alcohol*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Never	23.6	15.2	28.2	48.6	37.6	41.2	20.0	30.5	17.5	21.8	26.1	31.1	19.7	32.0	25.9	31.2	39.5
Less than once a month	56.3	40.0	59.7	41.9	53.7	40.1	60.7	42.1	60.5	40.5	58.3	40.5	47.4	43.3	58.0	40.9	45.5
Once a month	15.2	20.9	9.4	6.8	5.0	12.0	15.2	13.4	18.6	17.1	11.8	13.8	31.8	16.0	12.3	14.1	11.0
Once in two weeks	2.1	9.6	0.6	1.1	0.0	2.2	2.5	5.4	1.7	9.1	1.4	5.8	0.0	4.4	1.4	5.5	2.0
Once a week	1.7	8.5	0.7	0.3	1.8	1.7	0.8	4.3	.8	7.4	1.2	4.9	0.0	2.2	1.2	4.4	2.0
Several times a week	0.4	3.9	0.6	0.7	0.0	2.2	0.8	2.1	.8	2.9	0.5	2.7	0.0	1.1	0.5	2.4	0.0
Don't know	0.7	1.8	0.7	0.8	1.8	0.6	0.0	2.1	0.1	1.1	0.7	1.3	1.1	1.1	0.7	1.3	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 23: Negative health effects of alcohol (multiple responses)?

Negative effects*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	31.5	6.7	16.6	9.5	27.4	10.9	21.2	8.0	23.0	5.0	23.6	7.9	36.7	8.7	23.9	8.0	1.5
Liver function disorder	50.8	68.4	40.3	68.7	41.4	60.7	45.6	68.0	51.3	69.6	45.7	67.3	36.2	60.1	45.5	66.1	82.0
Alcoholic psychosis	12.4	21.9	29.6	34.9	16.5	24.4	25.2	23.2	21.8	37.8	21.5	31.3	7.1	12.8	21.1	28.2	41.5
Memory disorder	9.1	13.9	21.9	28.5	17.3	19.7	14.4	23.1	14.8	19.6	15.6	21.3	13.2	18.6	15.6	20.9	36.0
Gastroenteric diseases	n/a	12.0	n/a	26.2	n/a	18.6	n/a	17.6	n/a	20.3	n/a	19.0	n/a	17.5	n/a	18.8	29.5
Other	10.6	14.5	8.6	25.6	8.5	17.5	9.6	21.8	7.3	20.0	9.6	16.6	7.8	35.7	9.6	19.8	34.0
Lung Cancer	1.7	7.8	4.8	7.7	3.2	5.5	3.6	10.2	3.0	7.4	3.1	6.9	8.8	12.0	3.3	7.7	10.5
Meteorism	0.0	n/a	3.6	n/a	0.9	n/a	2.6	n/a	2.0	n/a	1.8	n/a	1.1	n/a	1.8	n/a	0.0
Sexual function disorder	1.1	1.0	0.7	3.8	0.9	2.1	0.8	1.6	1.0	3.4	0.9	2.2	1.1	3.2	0.9	2.3	18.0

* Weighted data presented.
n/a "not asked"

Table 24: Number of negative health effects of alcohol known.**

Number known*	Percent		
	BLS	MPS	HLSS
No negative effects known	33.5	13.6	2.5
1 known	49.2	43.9	26.0
2 known	13.0	30.8	38.5
3 known	4.3	8.8	21.5
4 + known	0.0	2.9	11.5
Total	100.0	100.0	100.0
Average	**0.9**	**1.4**	**2.2**

* Weighted data presented.
** The response, "other," is not included because not certain if correct

Table 25: Negative health effects of alcohol during pregnancy (multiple response)?

Negative effects&	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
No negative effects	1.5	0.0	0.0	0.0	1.1	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	0.0
Don't know	47.7	18.0	6.9	13.3	30.8	23.9	29.1	12.1	18.5	11.3	26.6	15.4	46.8	17.5	27.1	15.7	2.5
Death of a mother	14.8	4.6	19.8	8.3	15.0	7.6	19.0	6.5	18.3	5.0	17.8	7.2	1.1	2.1	17.3	6.4	46.5
Death of the fetus		31.5		21.2		24.1		25.3		30.6		27.8		20.4		26.6	54.5
Physical deficiency of the newborn	32.8	36.4	59.8	47.6	45.3	42.7	41.3	38.0	56.0	45.0	46.6	40.8	41.6	46.9	46.5	42.8	71.0
Mental deficiency of the newborn	22.7	33.0	73.8	58.4	46.7	37.7	49.0	44.0	50.8	54.1	49.1	45.6	28.0	43.4	48.6	45.2	68.0
Spontaneous abortion	2.4	12.0	5.4	15.9	4.1	12.1	5.0	14.5	2.0	15.2	3.8	14.1	8.6	13.0	3.9	13.9	23.5
Premature delivery	2.1	13.4	5.5	16.7	2.0	10.8	4.2	17.2	5.9	16.9	3.9	16.3	0.0	8.6	3.8	15.0	19.5
Other	0.7	1.4	1.3	10.9	1.8	6.7	0.8	4.8	0.0	6.6	1.0	4.1	0.0	15.3	1.0	6.0	6.0

* Weighted data presented.

Table 26: Number of negative health effects of alcohol during pregnancy known.**

Number known*	Percent		
	BLS	MPS	HLSS
No negative effects known:	28.3	18.8	3.0
1	34.2	33.9	10.5
2	30.8	31.3	26.5
3	6.4	11.4	28.0
4 +	0.2	4.5	32.0
Total	100.0	100.0	100.0
Average	**1.2**	**1.5**	**2.9**

* Weighted data presented.
** The response, "other," is not included because not certain if correct or not.

Smoking, Drinking, Neither

Table 27: Percentage of youth by whether they smoke and drink.

Smoking/drinking*	Percent		
	BLS	MPS	HLSS
Neither smoke or drink	22.5	31.6	38.5
Smoke or drink	61.5	56.9	56.0
Both smoke and drink	16.1	11.5	5.5
Total	100.0	100.0	100.0

* Weighted data presented.

Signs of Puberty

Table 28: What characteristics indicate that a boy has reached puberty – boys only (multiple response)?

Characteristics boy reached puberty*	Age						Location				Total		
	15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	40.3	11.7	40.0	4.2	41.2	5.4	41.2	6.4	10.1	10.2	40.4	7.1	2.3
Body becomes more muscled/ stronger	4.4	22.3	13.9	15.8	9.7	25.9	9.6	22.7	3.1	14.1	9.4	21.3	48.3
Hair growing in the genital/under arms	6.0	52.2	3.4	46.3	12.5	53.8	6.7	51.9	1.8	44.9	6.6	50.7	73.6
Height and weight increase	0.0	19.3	3.4	15.8	5.6	18.3	2.7	21.0	0.0	2.0	2.7	17.8	39.1
Has pimples	0.0	36.3	3.2	40.0	0.0	33.2	1.3	35.2	0.0	43.2	1.3	36.5	52.9
Attracted to girls	20.8	17.1	26.0	30.6	32.7	27.9	26.5	25.0	0.0	26.8	25.8	25.3	37.9
His voice becomes heavier	10.1	53.6	1.6	61.0	10.7	55.9	7.2	60.0	1.7	41.3	7.0	56.9	65.5
Experiencing wet dreams	1.9	2.2	3.2	1.1	1.7	2.2	2.4	2.1	0.0	0.0	2.4	1.8	6.9
Other	0.0	3.2	1.6	8.4	0.0	6.4	0.6	5.2	0.0	10.3	0.6	6.0	5.7

* Weighted data presented.

Table 29: Percentage of boys by number of signs of puberty identified.**

Number known:	Percent		
	BLS	MPS	HLSS
No signs identified	41.1	9.9	2.3
1 sign	47.6	15.2	2.3
2 signs	9.0	42.9	23.0
3 + signs	2.3	32.1	72.4
Total	100.0	100.0	100.0

* Weighted data presented.

** The response, "other," is not included because not certain if correct, as well as the response, "attracted to girls."

Table 30: What characteristics indicate that a girl has reached puberty – girls only? (multiple response)

Characteristics girl reached puberty*	Age						Location				Total		
	15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	0.0	3.3	0.0	2.2	0.0	1.1	0.0	2.3	0.0	2.2	0.0	2.2	0.0
Height and weight increase	17.2	23.6	17.5	26.2	20.6	28.6	18.1	27.7	22.2	13.5	18.2	25.3	58.4
Breast start to grow	32.9	70.6	49.5	79.0	29.8	72.7	38.3	75.6	35.8	67.7	38.2	74.3	86.7
Has menstruation every month	84.2	73.1	82.5	81.2	89.4	82.1	85.1	78.8	74.1	78.8	84.9	78.8	89.4
Hair growing in the genital/under arms	5.3	22.3	8.4	28.7	1.7	27.5	5.6	29.6	0.0	9.0	5.5	26.2	69.9
Has pimples	30.4	44.3	36.3	52.7	30.7	50.1	32.2	50.1	50.9	44.2	32.7	49.1	70.8
Attracted to boys	10.5	8.0	10.3	10.0	18.3	7.2	12.7	9.2	0.0	4.8	12.4	8.5	30.1
Other	0.0	13.7	3.3	12.1	0.0	13.1	1.3	12.2	0.0	16.7	1.2	13.0	21.2

* Weighted data presented.

Table 31: Percentage of girls by number of signs of puberty identified.**

Number of signs*	Percent		
	BLS	MPS	HLSS
No signs identified	1.2	3.8	0.0
1 sign	32.2	15.4	0.0
2 signs	29.6	26.5	9.7
3 signs	24.2	24.8	19.5
4 + signs	12.6	29.4	70.8
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct, as well as the responses "attracted to boys" and "like to dress-up."

Reproductive Health Seeking Behavior

Questions about RH in general and services

Table 32: How important is information about reproductive health to you?

Level of importance*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
1 - Very little	14.4	2.9	5.0	1.1	12.3	3.3	7.5	2.1	8.8	0.6	9.7	2.4	5.7	0.0	9.6	2.0	0.0
2 - Little	14.3	1.4	4.2	3.0	10.2	3.3	8.4	2.1	8.8	1.1	9.3	2.4	2.2	1.2	9.2	2.2	0.0
3 - Middle	19.7	10.6	17.9	15.6	14.3	14.2	22.1	13.4	20.5	11.3	19.1	12.3	5.7	16.4	18.8	13.0	0.0
4 - Somewhat	17.1	23.5	21.7	21.2	21.2	22.1	23.7	22.4	10.3	22.7	19.3	23.9	22.5	15.0	19.4	22.4	6.0
5 - Very much	34.6	61.6	51.3	59.0	42.1	57.0	38.3	59.9	51.7	64.3	42.5	58.9	63.9	67.4	43.1	60.4	94.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average	3.4	4.4	4.1	4.3	3.7	4.3	3.8	4.4	3.9	4.5	3.8	4.4	4.4	4.5	3.8	4.4	4.9

* Weighted data presented.

Table 33: If you had a reproductive health problem or question, where would you go for help? (multiple response)

Source of help*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	16.5	1.4	2.0	3.0	11.1	1.6	7.0	3.7	9.5	1.1	9.0	2.0	13.8	3.2	9.1	2.2	1.5
Gynecologist / doctor	66.1	64.5	77.0	68.1	71.7	67.5	69.6	61.6	74.3	69.9	71.5	66.2	73.8	66.3	71.6	66.2	67.2
Mother	2.9	15.7	67.4	55.3	36.2	38.0	37.2	33.1	32.2	32.9	35.9	34.1	24.0	37.4	35.6	34.6	33.5
Father	10.7	32.4	1.9	0.7	7.3	23.7	7.7	15.0	2.5	11.5	6.4	16.9	1.3	19.1	6.3	17.2	6.5
Friend	4.2	33.3	7.2	24.7	2.7	21.9	9.2	32.7	5.1	32.9	5.9	29.4	0.0	28.0	5.7	29.2	23.0
Elder sister/brother	2.4	8.2	5.3	4.3	4.9	4.5	4.4	8.0	1.7	6.8	3.9	6.5	4.6	5.6	3.9	6.3	3.5
Other relatives	2.4	0.7	5.0	2.2	3.9	2.7	4.9	2.0	1.7	1.0	3.7	2.6	4.6	0.0	3.8	1.4	1.0
Peer educator	3.0	7.4	4.0	12.5	2.0	8.6	3.3	9.2	6.1	11.8	3.6	10.1	0.0	8.6	3.5	9.8	8.5
Grand parents	0.4	0.7	4.4	1.1	1.8	1.1	2.5	1.0	3.4	0.5	2.5	1.2	0.0	0.0	2.5	0.9	0.5
Nurse/midwife	0.0	0.4	1.3	2.3	0.0	1.1	1.6	1.6	0.1	1.0	0.6	1.5	1.1	0.0	0.6	1.3	1.0
Spouse	1.3	0.7	0.7	0.8	0.9	0.0	0.0	2.0	2.5	0.0	1.0	0.6	0.0	1.0	1.0	0.8	0.0
Teachers	0.0	0.0	1.9	0.6	0.0	1.0	2.5	0.0	0.1	0.0	1.0	0.4	1.1	0.0	1.0	0.3	2.0
Books	0.0	0.7	1.1	6.1	0.9	3.3	0.0	3.5	0.8	4.4	0.6	3.2	0.0	6.0	0.6	3.3	3.0
Training course/meeting	0.8	0.7	0.0	0.7	1.1	1.0	0.0	0.0	0.0	1.5	0.4	0.8	0.0	1.0	0.4	0.7	6.0
Telephone Hotline	n/a	0.7	n/a	0.4	n/a	0.6	n/a	0.5	n/a	1.1	n/a	1.2	n/a	0.0	n/a	0.6	17.0
Magazines	0.0	2.5	0.4	1.1	0.0	2.7	0.0	1.0	0.8	2.5	0.2	2.4	0.0	0.0	0.2	2.0	2.0
Pharmacist	0.0	0.7	0.0	0.4	0.0	0.6	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0	0.3	0.5	0.5

* Weighted data presented.

Table 34: Number of correct answers of where to go for RH questions (*correct: gynecologist/doctor, mother, father, nurse/midwife*)**.**

Number of correct responses*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
0	24.8	22.4	2.8	11.9	15.8	13.7	11.9	21.9	13.0	16.1	13.6	18.0	14.9	14.1	13.6	17.4	11.5
1	72.1	48.0	47.6	51.8	54.0	46.7	61.7	49.1	65.0	53.7	59.4	49.5	71.2	51.1	59.7	49.8	57.5
2	1.8	23.9	49.0	34.5	29.2	35.2	24.8	24.6	21.9	27.4	26.1	28.2	12.9	32.7	25.7	29.0	26.0
3	1.3	5.7	0.7	1.9	0.9	4.4	1.6	4.3	0.1	2.8	1.0	4.2	1.1	2.1	1.0	3.9	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 35: Where do you think someone can get reproductive health services (multiple response)?

Where to get reproductive health services*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	16.5	4.6	6.8	6.2	16.1	6.2	7.9	6.4	10.2	3.4	11.2	4.2	23.5	11.1	11.5	5.4	2.0
Clinic	52.3	88.3	61.6	62.9	53.5	76.9	57.1	78.1	62.2	73.0	56.7	76.6	68.7	73.7	57.0	76.1	73.0
Maternity hospitals	10.0	1.8	42.6	27.3	26.0	14.1	28.6	15.6	24.0	12.2	26.9	13.9	11.9	14.3	26.5	14.0	13.0
Ambulatory	32.6	6.0	10.9	5.2	21.1	4.9	22.2	4.8	21.3	7.3	22.1	5.9	1.6	4.4	21.6	5.7	5.5
Women consultation centers	0.0	0.0	21.0	37.2	11.4	18.0	10.2	16.1	10.3	19.5	10.8	19.0	5.5	12.2	10.7	17.8	27.5
RH cabinets	1.7	14.1	4.2	12.1	2.7	9.1	4.1	13.9	1.7	16.5	3.1	13.9	0.0	9.7	3.0	13.2	12.0
Pharmacy	0.0	12.2	2.6	2.7	1.1	7.8	0.8	7.5	2.5	7.5	1.4	8.7	0.0	2.2	1.3	7.6	0.0
Traditional healers	0.6	1.1	0.4	3.4	0.0	2.2	0.8	1.1	0.8	3.5	0.5	2.2	0.0	2.3	0.5	2.2	1.0
Telephone hotline	0.0	3.2	0.0	2.2	0.0	2.2	0.0	2.6	0.0	3.1	0.0	3.3	0.0	0.0	0.0	2.8	15.0

* Weighted data presented.

Table 36: Number of correct answers of where to go for RH services *(correct: clinic, maternity hospital, ambulatory, women's consult, RH cabinet, and telephone hotline*).

Number correctly identified RH services*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
0	17.1	5.7	7.6	7.7	16.1	8.4	8.7	7.5	11.9	4.0	12.0	5.3	23.5	13.3	12.3	6.6	2.0
1	71.8	77.3	51.5	53.2	58.5	66.6	63.6	61.9	62.6	69.1	61.4	66.4	65.2	62.6	61.5	65.7	61.5
2	8.6	14.8	34.7	26.3	20.8	18.0	24.4	22.1	19.6	19.7	22.1	20.2	11.3	20.8	21.8	20.3	27.0
3	2.5	2.1	5.6	11.0	3.6	5.9	3.3	7.0	5.9	6.2	4.2	7.0	0.0	3.4	4.1	6.4	7.5
4 +	0.0	0.0	0.7	1.8	0.9	1.0	0.0	0.5	0.0	1.2	0.3	1.1	0.0	0.0	0.3	0.9	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 37: Number of correct answers of where to go for RH counseling (mother, gyn, father, nurse/midwife).

Number correct*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
None correct	75.7	77.8	58.4	45.1	66.3	60.4	65.4	61.7	70.2	64.3	66.8	62.0	74.8	62.8	67.0	62.1	47.5
At least 1 correct	24.3	22.2	41.6	54.9	33.7	39.6	34.6	38.3	29.8	35.7	33.2	38.0	25.2	37.2	33.0	37.9	52.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 38: Have you heard of a confidential counseling telephone hotline service that youth can call to ask questions about reproductive health? (Only asked on MPS & HLSS)

Telephone counseling service*	Gender		Age			Location		Total	
	Boys	Girls	15	16	17	Urban	Rural	MPS	HLSS
Heard of:									
No	59.9	59.7	64.9	60.7	53.6	60.9	54.4	59.8	12.5
Yes	40.1	40.3	35.1	39.3	46.4	39.1	45.6	40.2	87.5
If yes, ever used hotline service?									
No	95.5	97.1	98.5	92.8	98.8	95.4	100.0	96.3	91.4
Yes	4.5	2.9	1.5	8.2	1.2	4.6	0.0	3.7	8.6
If yes, how would you evaluate the counseling you received?									
1 – Not helpful	0.0	0.0	0.0	0.0	0.0	0.0	---	0.0	0.0
2	20.0	0.0	0.0	16.6	0.0	12.6	---	12.6	0.0
3	20.0	34.3	0.0	33.4	0.0	25.3	---	25.3	6.7
4	39.9	34.3	0.0	33.4	100.0	37.8	---	37.8	13.3
5 – Very helpful	20.0	31.4	100.0	16.6	0.0	24.3	---	24.3	80.0

* Weighted data presented.

Questions about sexual relations

Table 39: How regularly are sexual relations discussed among your friends?

Frequency of discussing sexual relations with friends*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	0.0	1.4	0.0	3.4	0.0	2.8	0.0	3.2	0.0	1.1	0.0	2.2	0.0	3.4	0.0	2.4	0.5
1 - Never	8.7	3.2	28.6	27.5	23.1	18.2	19.4	12.7	11.5	13.9	18.5	13.7	31.5	21.7	18.8	14.9	10.5
2 - Occasionally	56.1	56.9	65.1	58.8	64.3	54.1	53.9	63.6	65.3	57.5	60.8	56.8	52.2	64.9	60.6	57.8	58.0
3 - Frequently	32.9	34.5	6.3	10.2	2.3	23.8	25.1	21.1	21.5	24.6	19.6	24.9	11.8	13.4	19.4	22.9	28.0
4 - Constantly	2.3	3.9	0.0	0.0	0.3	1.1	1.6	2.2	1,7	2.9	1.1	2.5	4.6	0.0	1.2	2.1	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 40: Have you sought any information regarding sexual relations in the last 6 months, and if so, where?

Source of information regarding sexual relations*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Did not seek information	65.7	33.2	56.8	48.4	66.3	46.5	60.2	39.0	55.1	35.9	61.0	38.1	68.5	52.2	61.2	40.5	26.0
Don't know	8.0	13.2	5.7	8.0	8.6	11.2	5.1	10.2	7.0	10.9	6.9	10.4	4.6	12.3	6.9	10.7	7.0
Mother	0.0	0.4	0.0	11.4	0.0	5.1	0.0	7.4	0.0	4.5	0.0	6.3	0.0	2.3	0.0	5.7	15.5
Father	1.8	1.4	0.0	0.0	0.0	0.6	1.8	1.1	0.8	0.6	0.9	0.9	0.0	0.0	0.9	0.7	0.5
Other relative	0.6	0.7	1.3	2.2	0.9	1.6	1.6	1.5	0.0	1.7	1.0	1.3	0.0	2.1	1.0	1.4	1.5
Spouse	0.6	1.1	0.0	0.4	0.0	0.5	0.8	1.5	0.0	0.0	0.3	0.8	0.0	0.0	0.3	0.8	0.5
Class mate/friend/peer	16.3	17.7	24.8	16.2	16.4	14.2	23.8	15.5	21.9	21.4	20.6	17.8	20.4	12.8	20.6	17.0	19.0
Gynecologist/doctor	0.0	1.8	0.0	1.2	0.0	0.5	0.0	2.2	0.0	1.7	0.0	1.6	0.0	0.0	0.0	1.5	0.5
Teacher	0.0	0.3	2.0	0.8	0.9	0.0	0.0	0.5	2.6	1.1	1.0	0.8	1.1	0.0	1.0	0.6	1.5
Books	0.0	1.3	1.0	1.5	0.0	1.5	0.8	0.5	0.8	2.3	0.5	1.8	0.0	1.0	0.5	1.5	3.5
Magazines	1.3	11.8	1.7	2.2	0.2	7.2	1.7	9.1	3.1	5.1	1.4	7.6	4.3	5.3	1.5	7.2	2.5
Newspapers, brochures	0.1	4.3	0.0	0.8	0.0	2.5	0.0	2.7	0.1	2.9	0.0	2.6	1.1	4.4	0.0	2.6	1.0
TV	5.1	11.7	6.1	6.4	6.7	7.5	3.3	8.0	7.6	11.9	5.8	9.5	0.0	7.5	5.6	9.2	4.5
Training course/meeting	0.4	0.7	0.6	0.4	0.0	0.5	0.8	1.5	0.8	1.0	0.5	1.2	0.0	0.0	0.5	0.2	12.5
Telephone hotline	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 41: Which source do you consider the *most reliable* source of information about sexual relations?

Reliable source of information on sexual relations*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Did not seek information	5.1	2.8	2.3	3.7	2.7	5.4	4.2	2.2	4.2	2.3	3.8	3.3	0.0	3.2	3.7	3.3	2.5
Don't know	32.5	11.0	24.5	9.8	36.6	13.8	23.9	9.6	23.1	7.8	27.7	9.4	57.5	15.2	28.5	10.4	6.0
Mother	0.0	0.7	24.0	27.4	12.6	16.1	12.9	13.2	10.4	11.2	12.3	14.6	5.3	8.0	12.2	13.5	20.5
Father	13.7	3.2	0.0	0.0	9.4	2.0	7.5	2.0	1.7	1.7	6.8	2.0	4.4	0.0	6.8	1.7	3.0
Other relative	2.6	1.3	0.4	1.7	0.9	2.0	2.5	2.0	0.8	0.5	1.5	1.5	0.0	2.1	1.5	1.7	1.5
Spouse	3.8	2.4	0.0	1.0	0.0	0.0	3.3	2.5	2.5	2.6	1.9	2.0	0.0	0.0	1.9	1.7	0.0
Class mate/friend/peer	19.9	15.2	9.6	9.5	14.1	12.0	14.5	12.4	15.9	13.0	14.8	12.4	10.4	12.7	14.7	12.5	13.5
Gynecologist	10.5	17.9	17.6	26.8	11.7	21.8	14.2	22.4	17.5	22.3	14.1	20.8	13.9	29.2	14.1	22.2	22.0
Nurse/midwife	0.1	0.3	0.0	0.7	0.0	0.5	0.0	.5	0.2	0.5	0.0	0.6	1.6	0.0	0.0	0.6	0.0
Teacher	0.1	0.3	1.7	0.3	0.9	0.5	0.8	.5	1.0	0.0	0.9	0.4	1.6	0.0	0.9	0.4	0.5
Books	3.9	5.3	10.8	6.4	3.6	4.4	6.8	4.9	13.8	7.9	7.5	5.9	3.3	5.0	7.4	5.8	5.5
Magazines	1.6	9.3	2.5	4.9	3.6	8.3	0.1	4.8	2.8	8.6	2.1	7.7	2.0	4.1	2.1	7.2	2.5
Newspapers, brochures	0.0	7.5	2.1	0.7	0.0	3.1	1.6	5.4	1.7	4.1	1.1	3.9	0.0	6.1	1.0	4.3	1.0
Radio	0.0	2.4	0.0	0.0	0.0	1.0	0.0	1.6	0.0	1.0	0.0	1.4	0.0	0.0	0.0	1.3	1.0
TV	4.9	17.1	2.3	4.0	1.1	7.1	6.8	13.4	2.5	12.7	3.7	10.7	0.0	13.1	3.6	11.1	5.0
Training course/meeting	0.0	0.3	1.5	2.0	0.9	1.0	0.0	1.0	1.7	1.7	0.8	1.1	0.0	0.0	0.8	0.9	8.0
Telephone hotline	0.0	3.0	0.0	0.0	0.0	1.1	0.0	1.0	0.0	2.3	0.0	1.8	0.0	0.0	0.0	1.5	7.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Pregnancy

Table 42: During which part of the monthly cycle does a woman have the greatest chance of becoming pregnant?

Greatest chance of becoming pregnant*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	89.5	54.6	34.1	53.8	70.9	63.5	59.7	48.6	49.9	50.8	61.0	53.9	77.5	55.7	61.4	54.2	14.5
Right after her period has ended	3.7	21.7	49.2	30.4	18.6	19.1	27.8	7.5	37.2	27.7	26.9	26.5	21.4	22.9	26.5	25.9	9.5
Just before her period begins	0.0	6.1	9.2	5.6	4.9	3.3	4.1	30.6	5.3	6.8	4.8	6.0	0.0	5.4	4.7	5.9	8.5
In the middle of her cycle	6.1	13.0	4.8	10.2	2.0	10.9	7.5	9.1	7.6	9.6	5.6	9.1	0.0	13.8	5.5	9.9	65.0
During her period	0.7	4.6	2.6	3.8	3.6	3.2	0.8	4.3	0.0	5.1	1.7	4.6	0.0	2.1	1.7	4.2	2.5
Other	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 43: What do you think are the complications with early pregnancy/delivery (MPS & HLSS only)?

Complications of early pregnancy*	Gender		Age			Location		Total	
	Boys	Girls	15	16	17	Urban	Rural	MPS	HLSS
Don't know	32.6	17.1	32.1	25.1	18.2	23.3	34.4	25.2	9.5
No negative effects	0.7	4.9	0.6	4.2	3.3	1.5	8.7	2.7	0.5
Maternal death	9.2	25.2	14.8	18.3	17.5	17.6	13.4	17.4	59.0
Low birth weight	21.7	11.0	13.2	17.2	19.3	16.8	15.2	16.5	37.5
Bleeding	5.0	22.5	9.7	17.3	12.9	15.6	2.3	13.4	32.0
Premature birth	16.0	29.6	21.8	21.6	24.2	24.3	13.3	22.5	40.0
Mental & physical disabilities in child	14.5	33.3	21.8	22.0	27.0	23.6	23.1	23.5	36.5
Stillbirth	22.7	22.8	19.8	20.4	28.3	23.5	18.8	22.7	35.0
Spontaneous abortion	12.7	21.3	12.6	19.3	18.5	16.9	16.5	18.3	24.5
High level of childhood illness	8.5	9.8	8.7	9.0	9.6	9.9	5.4	9.1	21.5
Overweight newborns	2.8	2.6	2.6	3.2	2.2	2.6	3.1	2.7	2.0
Other	0.4	3.8	2.3	1.0	2.7	1.5	4.4	2.0	3.5

* Weighted data presented.

Abortion

Table 44: Do you believe there are any health consequences of having an abortion? If so, what are they? (multiple response)

Health consequences of an abortion*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
No health consequences	3.3	2.8	3.8	1.9	3.2	2.7	5.2	1.1	1.7	3.4	3.7	2.2	0.0	3.1	3.6	2.3	0.0
Don't know	72.5	35.0	27.3	22.4	57.0	40.9	48.1	27.2	40.8	18.6	49.0	27.6	73.9	35.9	49.6	29.0	3.0
Sterility	18.1	51.2	43.1	65.2	26.5	45.3	30.0	62.2	38.3	66.1	31.1	59.7	19.1	48.9	30.8	57.9	88.5
Cervical injury	0.4	4.6	14.3	10.6	5.8	5.9	8.5	8.0	8.3	8.5	7.5	7.7	6.0	6.5	7.4	7.5	28.5
Psychological problems	4.5	0.0	8.7	0.0	3.6	0.0	6.8	0.0	10.7	0.0	6.7	0.0	1.3	0.0	6.6	0.0	0.0
Bleeding	0.0	7.0	10.6	17.9	6.7	8.8	5.1	11.	3.9	16.8	5.5	12.9	2.0	8.8	5.4	12.3	40.0
Ripping or perforation of uterus	0.6	5.3	9.7	7.2	2.7	3.0	6.6	8.0	6.9	8.5	5.3	6.6	1.6	0.1	5.2	6.2	13.0
Death	6.6	0.0	3.7	0.0	3.6	0.0	4.4	0.0	8.5	0.0	5.2	0.0	0.0	0.0	5.1	0.0	0.0
Infections	0.9	14.9	5.1	18.2	3.0	12.5	2.6	16.7	3.5	20.4	3.0	18.9	2.0	4.4	3.0	16.5	29.5
Shock	0.0	2.5	3.7	6.0	2.1	2.9	1.6	3.0	1.9	6.8	1.8	4.6	4.6	2.0	1.9	4.2	8.5
Anesthesia complications	0.0	0.3	3.4	3.1	1.8	0.5	1.6	2.5	1.7	2.0	1.8	1.8	0.0	1.0	1.7	1.7	1.0
Chronic abdominal pain	0.0	0.0	2.6	0.0	1.8	0.0	1.6	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0
Hemorrhage	0.0	1.8	2.1	1.9	0.0	0.5	1.6	1.0	0.0	3.5	1.1	2.0	0.0	0.0	1.0	1.8	3.0
Embolism	0.0	0.0	1.5	0.0	1.1	0.0	0.9	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.8	0.0	0.0
Vomiting	0.0	0.4	1.4	3.4	0.0	2.4	0.8	1.5	1.7	2.0	0.8	2.3	0.0	0.0	0.7	1.8	1.0
Gastro-intestinal disturbances	0.0	0.3	1.3	0.0	0.9	0.0	0.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.6	0.2	0.5
Fevers	0.0	4.6	0.9	1.1	0.0	3.0	0.1	3.0	1.7	3.5	0.4	3.2	0.9	3.1	0.4	2.9	15.5

* Weighted data presented.

Table 45: Percentage of youth by number of potential health consequences of having an abortion.**

Number known*	Percent		
	BLS	MPS	HLSS
None known	53.2	33.7	4.0
1 identified	27.6	36.6	27.5
2 identified	13.9	18.2	25.5
3 identified	4.5	7.8	26.0
4 + identified	0.8	3.7	17.0
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Contraceptives

Table 46: Do you know any medications or methods to avoid getting pregnant? If so, what are they?

Methods*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	44.3	4.3	31.4	9.1	45.6	10.2	31.6	5.2	35.4	4.4	37.0	5.2	67.7	13.4	37.8	6.6	1.0
Condom	46.2	89.0	50.3	80.6	35.9	83.3	55.2	84.0	56.3	87.7	48.9	87.3	22.5	73.6	48.3	85.0	95.0
Pill	27.3	55.1	40.8	67.0	23.3	48.5	38.8	61.7	43.2	72.4	34.6	63.6	16.4	46.9	34.1	60.8	78.5
IUD	10.5	16.7	15.6	25.5	6.4	12.4	17.6	25.8	16.3	24.3	13.4	22.7	0.9	11.9	13.1	20.9	38.0
Contraceptive (unspecified)	1.1	1.3	7.7	12.1	2.7	4.9	4.2	7.0	7.2	7.8	4.5	7.0	0.0	4.4	4.4	6.6	5.5
Douching	1.3	0.3	0.6	2.0	0.0	1.0	2.5	2.0	0.0	1.5	1.0	1.4	0.0	2.3	0.9	1.1	0.5
Traditional method	0.0	0.0	1.5	0.3	2.0	0.5	0.0	0.0	0.0	0.0	0.8	0.2	0.0	0.0	0.7	0.2	0.0
Other	0.7	1.8	0.7	2.3	1.8	0.5	0.0	2.0	0.0	4.0	0.7	2.6	0.0	0.0	0.7	1.7	2.0
Abstinence	0.4	0.0	0.7	2.0	0.9	1.0	0.0	1.0	0.8	1.0	0.6	1.2	0.0	0.0	0.6	1.0	1.5
Norplant	1.1	2.0	0.0	0.0	0.0	0.0	0.8	0.0	0.8	1.5	0.5	0.6	0.0	3.0	0.5	1.0	0.5
Injectable / Depo-Provera	0.6	0.3	0.0	1.0	0.0	1.0	0.8	0.5	0.0	0.5	0.3	0.6	0.0	1.1	0.3	0.7	1.5
Diaphram/foam	0.0	3.4	0.0	0.7	0.0	0.5	0.0	2.0	0.0	3.6	0.0	2.4	0.0	0.0	0.0	2.0	2.5
Herbs	0.0	1.0	0.6	0.7	0.0	0.0	0.8	1.5	0.0	1.0	0.3	0.8	0.0	1.0	0.3	0.8	0.5

* Weighted data presented.

Table 47: Have you ever had sex?

Had sex*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Yes	34.0	42.1	0.6	1.9	3.6	10.6	19.0	20.4	34.1	38.1	17.4	24.8	3.8	13.0	17.1	22.8	15.0
No	66.0	57.9	99.4	98.1	96.4	89.4	81.0	79.6	65.9	61.9	82.6	75.2	96.2	87.0	82.9	77.2	85.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Weighted data presented. 2 missing cases.

Table 48: At the time of your last sexual intercourse did you use contraceptive?

Used contraceptive*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS (n=68)	MPS (n=119)	BLS (n=1)	MPS (n=5)	BLS (n=4)	MPS (n=19)	BLS (n=23)	MPS (n=39)	BLS (n=42)	MPS (n=66)	BLS (n=66)	MPS (n=112)	BLS (n=3)	MPS (n=12)	BLS (n=69)	MPS (n=124)	HLSS (n=30)
Yes	65.2	81.5	0.0	20.6	50.0	79.5	51.8	76.3	76.6	80.4	63.8	81.2	100.0	58.3	64.0	79.0	73.3
No	34.8	18.5	100.0	79.4	50.0	20.5	48.2	23.7	23.4	19.6	36.2	18.8	0.0	41.7	36.0	21.0	26.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 49: What method of contraception did you use?

Method used*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS (n=49)	MPS (n=97)	BLS (n=0)	MPS (n=1)	BLS (n=2)	MPS (n=15)	BLS (n=13)	MPS (n=30)	BLS (n=34)	MPS (n=53)	BLS (n=46)	MPS (n=91)	BLS (n=3)	MPS (n=7)	BLS (n=49)	MPS (n=98)	HLSS (n=22)
Don't know	0.0	4.2	0.0	0.0	0.0	0.0	0.0	6.9	0.0	3.8	0.0	4.5	0.0	0.0	0.0	4.2	0.0
Condom	98.1	92.7	---	0.0	100	100	100	86.2	96.8	92.4	98.1	92.1	100	85.6	98.1	91.7	95.5
Withdrawal	2.8	0.0	---	0.0	0.0	0.0	8.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0	2.8	0.0	0.0
Diaphragm/foam/ cream	0.0	1.1	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.0	4.5
Contraceptive (unspecified)	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	14.4	0.0	1.0	0.0
Douching	0.0	0.0	0.0	100	0.0	0.0	0.0	3.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	0.0
Pill	1.9	1.0	---	0.0	0.0	0.0	0.0	0.0	3.2	1.9	1.9	1.1	0.0	0.0	1.9	1.0	0.0
Non-penetrative sex	1.9	0.0	---	0.0	0.0	0.0	0.0	0.0	3.2	0.0	1.9	0.0	0.0	0.0	1.9	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 50: Percentage of youth by number of modern contraceptives known.**

Number known*	Percent		
	BLS	MPS	HLSS
None known	39.2	6.6	1.0
1 known	29.3	30.5	18.0
2 known	23.5	43.6	41.5
3 known	7.2	16.5	36.0
4 known	0.8	2.8	3.5
Total	100.0	100.0	100.0
Average	1.0	1.8	2.2

* Weighted data presented.
** The response, "other," is not included because not certain if correct or not.

Table 51: Where did you get this contraception?

Contraception obtain from*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS (n=47)	MPS (n=97)	BLS (n=0)	MPS (n=1)	BLS (n=2)	MPS (n=15)	BLS (n=12)	MPS (n=30)	BLS (n=33)	MPS (n=53)	BLS (n=44)	MPS (n=91)	BLS (n=3)	MPS (n=7)	BLS (n=47)	MPS (n=98)	HLSS (n=22)
Don't know	2.8	3.2	---	0.0	0.0	0.0	8.3	3.4	0.0	3.8	2.9	3.4	0.0	0.0	2.8	3.1	4.5
Pharmacy	80.1	79.1	---	0.0	100	100	83.3	72.4	76.2	75.4	80.2	77.7	71.3	85.6	80.1	78.2	77.3
Friend	4.6	13.6	---	0.0	0.0	0.0	0.0	17.2	7.6	15.1	4.3	14.5	28.7	0.0	4.6	13.5	13.6
Partner	6.7	0.0	---	0.0	0.0	0.0	8.3	0.0	6.5	0.0	6.8	0.0	0.0	0.0	6.7	0.0	0.0
Peer counselor	2.8	0.0	---	0.0	0.0	0.0	8.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0	2.8	0.0	0.0
Relative	1.9	2.1	---	0.0	0.0	0.0	0.0	3.4	3.2	1.9	1.9	2.2	0.0	0.0	1.9	2.1	0.0
Medical person	0.0	1.0	---	100	0.0	0.0	0.0	3.5	0.0	1.9	0.0	2.2	0.0	0.0	0.0	2.1	0.0
Youth center	0.0	1.0	---	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	14.4	0.0	1.0	0.0
Clinic/Hospital	3.9	0.0	---	0.0	0.0	0.0	0.0	0.0	6.5	0.0	3.9	0.0	0.0	0.0	3.9	0.0	4.5
Open market (bazroba)	0.0	0.0	---	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 52: Which of the following attitudes best describes your plans about using a contraceptive the first/next time you have sexual intercourse? (MPS and HLSS only)

Attitudes*	Gender		Age			Location		Total	
	Boys	Girls	15	16	17	Urban	Rural	MPS	HLSS
I haven't thought about it	20.4	76.5	52.4	47.0	42.4	46.3	52.1	47.3	49.0
I plan to use a contraceptive and will not have sex without using one.	53.0	5.7	25.5	32.7	32.7	31.9	22.7	30.3	35.5
I plan to use a contraceptive, as long as it's convenient.	11.0	4.9	11.5	4.3	8.6	7.7	9.7	8.0	6.0
I plan to use a contraceptive, as long as my partner doesn't object	4.6	0.8	1.1	3.8	3.5	3.1	1.0	2.8	3.0
I plan to use a contraceptive only if my partner insists on it	2.1	0.4	1.7	0.5	1.7	1.6	0.0	1.3	1.5
I do not plan to use a contraceptive	7.1	10.2	6.1	10.1	9.5	7.9	12.2	8.6	4.5
Other	1.4	1.2	1.2	1.6	1.1	1.1	2.2	1.3	0.5
No response	0.3	0.4	0.5	0.0	0.5	0.4	0.0	0.3	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

STIs and HIV/AIDS

Table 53: What does safe sex mean to you (multiple response)?

Safe Sex means*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	52.9	7.4	59.4	39.8	63.9	31.0	53.0	20.1	49.4	17.7	55.3	20.7	89.4	34.2	56.2	22.9	12.5
Using condom	46.5	84.8	33.3	53.7	31.5	62.3	45.2	71.8	44.1	75.5	40.7	72.4	7.6	57.1	39.8	69.9	81.0
Abstaining from sex	0.0	4.3	4.3	8.7	1.8	6.6	1.7	5.9	3.4	6.7	2.2	6.8	0.9	4.4	2.2	6.4	13.5
Avoiding multiple sex partners	0.0	9.2	3.7	3.4	1.8	4.4	0.8	5.4	3.6	9.7	1.9	6.7	0.0	5.3	1.9	6.4	10.5
Avoiding sex with prostitutes	1.8	15.6	1.2	8.3	1.8	11.0	0.8	10.8	2.1	14.7	1.5	13.5	2.2	5.3	1.5	12.1	13.5
Other	0.0	0.7	3.0	7.3	1.8	3.3	1.7	4.9	0.8	3.4	1.5	4.0	0.9	3.4	1.5	3.9	3.0

* Weighted data presented.

Table 54: Percentage of youth who know 4 or more ways of safe sex.**

Number of ways:	Percent		
	BLS	MPS	HLSS
No ways known	56.8	24.4	15.0
1 way known	41.1	58.6	56.5
2 + ways known	2.2	14.8	23.5
3 + ways known	0.0	2.2	5.0
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Table 55: What are some reasons for using a condom?

Reasons*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	8.2	0.7	23.7	4.8	17.4	3.3	16.8	2.4	12.9	2.2	15.8	2.1	24.8	5.6	16.0	2.7	0.5
Avoid pregnancy	38.3	68.8	65.6	89.4	46.8	75.0	50.0	80.3	63.2	80.6	52.6	79.4	34.1	75.0	52.1	78.7	85.0
STI protection	70.1	73.8	30.8	46.7	43.2	53.7	53.8	61.8	55.1	67.0	50.2	61.3	47.9	58.4	50.2	60.8	73.5
HIV/AIDS protection	21.0	36.6	20.2	51.9	18.3	45.9	18.7	42.9	26.7	42.9	20.9	47.3	7.3	27.2	20.6	43.9	60.0
Other	1.4	0.0	0.7	0.0	1.8	0.0	0.9i	0.0	0.0	0.0	1.0	0.0	0.9	0.0	1.0	0.0	0.0

* Weighted data presented.

Table 56: Percentage of youth who know three of the reasons for using condom.**

Number of reasons*	Percent		
	BLS	MPS	HLSS
No reasons known	17.1	2.7	0.5
1 reason known	50.8	29.6	18.5
2 reasons known	24.4	49.4	43.0
3 reasons known	7.7	18.3	38.0
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Table 57: Have you heard of ABCD Approach?

Heard of ABCD Approach*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Yes	0.0	2.1	0.0	1.9	0.0	0.6	0.0	4.2	0.0	1.2	0.0	1.8	0.0	3.3	0.0	2.0	81.0
No	100.0	97.9	100.0	98.1	100.0	99.4	100.0	95.8	100.0	98.8	100.0	98.2	100.0	96.7	100.0	98.0	19.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 58: If yes, please tell me what each of the letters mean.

Meaning of letters*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS (n=0)	MPS (n=6)	BLS (n=0)	MPS (n=5)	BLS (n=0)	MPS (n=1)	BLS (n=0)	MPS (n=8)	BLS (n=0)	MPS (n=2)	BLS (n=0)	MPS (n=8)	BLS (n=0)	MPS (n=3)	BLS (n=0)	MPS (n=11)	HLSS (n=162)
A correct	---	67.1	---	20.3	---	0.0	---	50.0	---	50.0	---	50.8	---	33.3	---	46.0	93.2
B correct	---	67.1	---	0.0	---	0.0	---	38.1	---	50.0	---	50.8	---	0.0	---	36.9	95.7
C correct	---	33.7	---	0.0	---	0.0	---	25.4	---	0.0	---	25.5	---	0.0	---	18.5	93.2
D correct	---	16.8	---	20.3	---	0.0	---	25.2	---	0.2	---	12.7	---	33.3	---	18.4	92.6
All 4 (A,B,C,&D) correct	---	16.8	---	0.0	---	0.0	---	12.7	---	0.0	---	12.7	---	0.0	---	0.9	88.3

* Weighted data presented.

Table 59: Do you know of any infections a person can get through sexual intercourse? If yes, which do you know?

Infections*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know/remember	20.6	2.5	0.0	6.0	10.8	8.3	10.8	2.1	8.3	2.2	10.1	3.7	11.9	6.5	10.2	4.2	0.5
HIV/AIDS	75.9	92.5	82.2	92.0	72.4	89.9	83.1	94.1	83.0	93.8	79.1	92.5	78.1	91.2	79.1	92.3	98.5
Syphilis	22.7	37.0	4.1	8.8	5.8	15.5	14.1	24.2	23.4	31.0	13.5	26.0	5.5	10.9	13.3	23.5	45.0
Hepatitis B	2.8	6.8	16.2	13.4	13.2	6.1	6.0	9.7	9.6	14.1	9.6	11.0	9.2	4.6	9.6	9.9	50.0
Gonorrhea	6.2	9.6	1.3	1.1	0.9	3.9	3.3	6.4	8.5	6.1	3.8	5.8	0.0	4.0	3.7	5.6	26.6
Genital warts	3.2	1.0	0.7	0.0	0.9	1.0	2.5	0.5	2.5	1.0	2.0	1.0	0.0	0.0	1.9	0.6	2.0
Other	0.0	1.3	3.2	4.2	1.8	1.5	0.9	3.0	2.5	3.4	1.7	2.8	0.9	2.0	1.6	2.7	1.5
Herpes	0.0	1.3	0.0	0.0	0.0	1.5	0.0	1.0	0.0	0.5	0.0	1.2	0.0	0.0	0.0	0.9	13.0
Chlamydia	1.1	1.3	0.0	0.0	0.0	0.5	0.8	0.5	0.8	1.0	0.5	0.8	0.0	0.0	0.5	0.6	14.0

* Weighted data presented.

Table 60: Percentage of youth by number of STIs known.**

Number of STIs known:	Percent		
	BLS	MPS	HLSS
No STIs known	11.1	4.2	0.5
1 known	75.1	63.3	24.0
2 known	10.4	28.1	33.0
3 known	1.9	3.9	22.0
4 + known	0.8	0.6	20.5
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Table 61: What signs or symptoms suggest that a person has a sexually transmitted infection?

Signs or symptoms*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	83.5	42.5	87.9	72.2	88.0	64.8	87.9	58.1	78.9	47.0	85.6	54.6	89.1	67.3	85.7	56.8	24.5
Discharge from penis/vagina	10.4	37.0	0.8	2.7	2.7	11.1	5.0	19.9	10.7	31.0	5.7	22.0	2.0	12.9	5.6	20.5	38.5
Other	3.1	4.2	6.2	12.9	4.5	9.8	4.5	8.1	5.3	7.2	4.7	7.6	6.2	12.2	4.7	8.4	17.5
Painful urination	7.3	21.3	2.0	3.4	2.7	8.8	5.9	11.8	5.5	17.7	4.7	14.0	2.7	6.5	4.6	12.7	35.5
Sores or warts on penis/vagina	4.2	6.0	0.7	1.2	1.8	1.6	1.8	4.8	4.2	4.6	2.5	3.6	0.0	4.3	2.4	3.7	18.0
Loss of weight	0.0	6.4	3.9	14.6	2.0	9.3	0.8	10.8	3.8	10.8	2.0	11.2	0.0	5.6	2.0	10.3	28.0
Burning pain/itching in penis/vagina	2.3	17.0	0.5	3.4	0.0	7.2	0.8	7.0	4.4	17.7	1.5	11.3	0.0	6.5	1.4	10.5	25.0
Abnormal vaginal bleeding	0.0	3.5	0.0	3.5	0.0	2.8	0.0	2.1	0.0	4.0	0.0	3.1	0.0	2.3	0.0	2.9	8.5
Swelling in groin region	0.0	6.0	0.0	0.0	0.0	1.1	0.0	3.2	0.0	5.1	0.0	3.1	0.0	3.2	0.0	3.1	9.5

* Weighted data presented.

Table 62: Percentage of youth who know 4 or more STI signs.**

Number known*	Percent		
	BLS	MPS	HLSS
No STI signs known	89.9	63.1	30.0
1 known	5.5	18.1	19.0
2 known	3.4	12.4	21.5
3 known	0.9	5.1	19.5
4 + known	0.2	1.3	10.0
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Table 63: Have you heard of an illness/disease called AIDS, if not mentioned above?

Heard of HIV/AIDS*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Yes	90.9	90.9	97.0	97.3	98.2	96.1	99.2	99.5	95.8	98.9	90.0	98.0	100	98.8	98.0	98.2	100.0
No	1.1	1.1	3.0	2.7	1.8	3.9	0.8	0.5	4.2	1.1	10.0	2.0	0.0	1.2	2.0	1.8	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Weighted data presented.

Table 64: Please mention all the ways in which you believe a person can get HIV/AIDS. (multiple response)

Ways to get HIV/AIDS*	Gender				Age						Location				Total		
	Boys		Girls		15		16		17		Urban		Rural				
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	10.5	3.9	10.9	5.1	15.6	5.9	6.8	4.2	9.2	3.4	10.4	3.1	22.3	11.3	10.7	4.5	0.5
Sexual intercourse	87.0	91.0	83.9	84.4	78.8	87.8	90.7	85.7	87.3	90.4	85.6	89.8	76.1	83.2	85.4	87.9	94.0
Sharing needles/unclean medical equip.	37.1	50.2	46.3	46.0	33.8	41.7	43.9	46.9	50.5	56.1	52.0	49.1	21.3	44.0	41.7	48.2	70.5
Blood transfusions	20.2	51.0	16.4	60.8	12.3	54.7	20.3	54.4	24.1	57.9	18.4	59.3	11.8	37.4	18.3	55.6	82.0
Casual contact with infected person	20.0	7.2	15.4	9.0	16.1	5.0	18.0	10.8	19.4	7.9	17.9	7.7	7.4	9.8	17.6	8.0	10.0
Mother to child during pregnancy/birth	12.2	3.6	6.5	8.3	8.5	4.7	8.3	6.5	12.0	6.9	9.4	6.3	5.8	3.3	9.3	5.8	36.5
Mosquito or other insect bites	2.0	1.1	0.4	0.8	1.8	0.5	0.8	0.5	0.8	1.7	1.2	1.0	0.0	1.0	1.2	0.9	5.0
Through breast milk	3.0	0.0	0.0	5.9	0.0	3.1	1.6	4.5	3.4	2.8	1.5	3.2	0.0	1.0	1.5	2.8	34.0
Other	0.6	1.9	1.4	7.0	0.0	2.1	1.6	5.5	1.7	5.6	1.1	4.1	0.0	7.1	1.0	4.2	3.0

* Weighted data presented.

Table 65: Percentage of youth by number of ways to get HIV/AIDS.**

# ways known:	Percent		
	BLS	MPS	HLSS
None	12.0	7.4	0.5
1 known	45.3	23.2	6.5
2 known	30.2	39.0	17.0
3 known	9.0	27.1	42.0
4 + known	3.5	3.1	34.0
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Table 66: Can a person avoid getting HIV/AIDS? If yes, what do? (multiple response)

Ways to avoid getting HIV/AIDS*	Gender				Age						Location						
	Boys		Girls		15		16		17		Urban		Rural		Total		
	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	BLS	MPS	HLSS
Don't know	62.8	8.5	31.2	11.1	59.6	11.8	41.3	10.6	36.1	6.7	46.4	7.3	62.5	21.5	46.8	9.7	1.5
Use condoms for sexual intercourse	28.6	68.1	35.0	59.3	22.5	63.5	32.9	61.6	44.1	67.0	32.4	64.4	7.6	61.8	31.8	64.0	75.0
Avoid sharing needles/syringes	9.8	20.8	24.1	23.7	10.5	19.8	21.7	21.0	19.8	25.8	17.1	24.0	13.6	13.3	17.0	22.2	35.5
Avoid casual sex	3.7	6.8	13.7	14.0	6.4	8.9	10.6	10.8	9.6	10.8	8.9	10.7	2.4	7.6	8.8	10.2	17.5
Stay faithful to partner	0.9	15.5	14.8	10.9	5.5	9.0	9.3	10.8	9.6	20.2	8.1	15.3	2.4	3.3	7.9	13.3	22.5
Avoid commercial sex workers	5.6	20.0	8.1	18.4	7.9	18.9	5.0	20.4	8.0	18.3	6.9	20.2	5.3	14.4	6.8	19.3	17.5
Avoid contaminated blood	7.4	8.3	4.3	31.2	2.0	21.3	9.3	18.3	6.2	18.2	5.9	21.2	2.7	9.2	5.8	19.2	28.5
Avoid sex completely/abstinence	1.7	5.4	4.0	14.5	2.7	8.0	3.3	10.3	2.5	10.9	3.0	10.7	0.0	4.5	2.9	9.7	8.5
Other	0.0	0.4	4.4	6.7	2.1	2.3	3.3	3.3	0.8	4.5	2.2	2.9	4.4	5.6	2.2	3.4	8.5
Encourage partner to stay faithful	0.0	0.0	1.9	0.3	0.9	0.0	0.0	0.0	2.5	0.0	1.0	0.2	0.0	0.0	1.0	0.0	6.5

* Weighted data presented.

Table 67: Percentage of youth by number of means to avoid getting HIV/AIDS.**

# ways known:	Percent		
	BLS	MPS	HLSS
No means to avoid HIV/AIDS known	48.4	12.5	8.0
1 known	29.5	44.5	27.5
2 known	16.0	24.9	27.0
3 known	4.6	13.2	23.0
4 known	0.6	3.6	12.0
5 + known	0.9	1.3	2.5
Total	100.0	100.0	100.0

* Weighted data presented.
** The response, "other," is not included because not certain if correct.

Appendix 2: Questionnaire

ACT Research

Adolescent Boy/Girl
IEC Questionnaire for HWG Project

To the interviewer: read out the below-given text to each respondent

Hello, my name is…. …….. and I represent research center "ACT-Research". Our research company is carrying out a study that aims at surveying the attitudes, knowledge and behavior of youth towards reproductive health issues. Reproductive health issues include: relations of adolescents, reproductive organs, reproductive health itself, pregnancy, contraceptive concerns, HIV/AIDs, STIs, abortions, etc. Your sincere answers will enable the researchers to develop unbiased assessment of the situation and will help in the design of reproductive health programmes in Imereti region. Thank you very much in advance for your cooperation.

To the interviewer: fill in the below-provided table upon completion of the interview:

Parent's consent _____.

Interviewer's name/surname and code

[ ] _____

1. Place where interview was conducted

City of Zestaponi	1
Zestaponi region	2
Kutaisi	3

2. Name of the settlement _____ [ ]

Date interview was conducted _____ / _____
Date Month

Time interview started [ ] **Time interview finished** [ ]

Interview duration [ ]

I have conducted the interview with a completely stranger person myself by following all the given instructions. I have checked the correctness of the questionnaire before handing it to the research company. I take responsibility to provide obtained information to ACT Research only.

To the interviewer: use the following codes in the questionnaire

Refused to answer	**77**
Don't know/can't answer	**99**

Demography

1. Gender:

Boy	1
Girl	2

2. Age:

15 years old	1
16 years old	2
17 years old	3

3. Father's highest level of education:

Do not listen to any radio	0
Incomplete secondary	1
General secondary	2
Special technical college	3
Special secondary	4
Incomplete higher	5
Complete higher	6
Don't have father	7

4. Mother's highest level of education:

Incomplete secondary	1
General secondary	2
Special technical college	3
Special secondary	4
Incomplete higher	5
Complete higher	6
Don't have mother	7

5. Place of residence:

urban	1
rural	2

6, Could you please tell me, how many adult people (the age 18 and above) are there in your household?

_____.

7. Do you plan on attending university or technical education in the future?

Yes	1
No	2

8. Are you married?

Yes	1
No	2

9. Are you engaged?

Yes	1
No	2

Habits

10. Which radio station do you listen most frequently? ***(Do not read out. Mark a single code)***

11. Do you smoke? If yes, how many cigarettes do you smoke per day?

Have never smoked	0
I used to smoke, but not any more	1
Less than five cigarettes a day	2
About 6-9 cigarettes a day	3
More than 10 cigarettes a day	4

12. In general, do you think smoking has negative affects on health? If so, what kind of negative effects it has 12.1 on boy's health? 12.2 on girl's health? ***(Ask separately for boys and for girls, do not read out; mark all that apply).***

12.1 For boys

Cancer	1
Cardiovascular disease	2
Pulmonary disease	3
Increased risk of peptic ulcers	4
Increased facial wrinkling	6
Pre-mature dying	7
Decreased sexual performance	8
Other ***(specify):*** _____.	9
No negative effects at all	88
Don't know	99

12.2 For girls

Cancer	1
Cardiovascular disease	2
Pulmonary disease	3
Thyroid disorders	4
Increased risk of peptic ulcers	5
Increased facial wrinkling	6
Pre-mature dying	7
May alter menstrual function	9
More pain during menstruation	10
Increased risk of conception delay	11
Pregnancy complications	12
Other ***(specify):*** _____.	13
No negative effects at all	88
Don't know	99

13. How often do you consume any type of alcohol (beer, wine, liquor, vodka, champagne, etc.)?

Never	0
Less than once a month	1
Once a month	2
Once in two weeks	3
Once a week	4
Several times a week	5
Don't know	6

14. Do you think drinking alcohol during pregnancy may have negative health affects? If so, what are they? ***(Do not read out; mark all that apply. Probe: What else?)***

Death of a mother	1
Death of a foetus	
Spontaneous abortion (miscarriage)	2
Premature delivery	3
Physical deficiency of the newborn	4
Mental deficiency of the newborn	5
Overweight of newborn	6
Other ***(Specify):*** _____.	7
No negative effects	88
Don't know	99

15. What negative effects can frequent alcohol consumption have on health? ***(Do not read out; mark all that apply; Probe: What else?)***

Liver function disorder	1
Alcoholic psychosis	2
Lung Cancer	3
Sexual function disorder	4
Memory disorder	6
Gastroenteric diseases	7
Other ***(specify):*** _____.	8
Don't know	99

Reproductive Health

Now I will ask you some questions about reproductive health. Reproductive health related issues include reproductive health organs, pregnancy, contraceptive concerns, HIV/AIDS, abortion, STIs, etc.

16. In 2005, or this year, have you attended any classes, sessions or other meetings where issues of reproductive health were discussed?

Yes	1	**Carry on**
No	2	**Skip to Q18**

16a. If yes, do you remember the name of the organization or program that conducted the sessions/ lectures/seminars/training? ***(Do not read out the list! mark all that apply)***

Save the Children	1
JSI (John Snow International)	2
Program: healthy women in Georgia	3
Other ***(Specify):*** .	4
Don't remember	99

16b. Can you identify the organization/programme which conducted the sessions/ lectures/seminars/training? ***(Show the list of logos to the respondent. Mark all that apply)***

Identify Save the Children logo	1
Identify JSI (John Snow International) logo	2
Identify Healthy Women in Georgia logo	3
Cannot identify any of these logos	

17. Which of the following topic/topics were discussed at the lecture/meeting/seminar/training? ***(Read out the list! Mark all that apply)***

Puberty	1
Reproductive health of adolescents (family planning, contraception, abortion)	2
Sexually transmitted infections (STIs)	3
HIV/AIDS	4
Early marriage/pregnancy	5
Healthy habits (smoking, alcohol consumption and drug abuse)	6
Other ***(Specify):*** _____ .	7
Don't remember	

17a. How satisfied were you with the lecture/meeting/seminar/training you attended? Could you please, express your attitude of above mentioned issue on the scale, where 1 means very dissatisfied and 5 means very satisfied?

1=Very dissatisfied 5=Very satisfied

(1) (2) (3) (4) (5)

18. How important is information about reproductive health to you? Please rate your approach on 1 to 5 scale where 1 means not very important and 5 – very important.

1=Not important 5=Very important

(1) (2) (3) (4) (5)

Puberty

19. What characteristics indicate that a 19.1 boy has reached his puberty? 19.2 girl has reached her puberty? ***(Ask separately for boys and for girls, do not read out; mark all that apply).***

19.1 For boys

Body becomes more muscled/stronger	1
Height and weight increase	2
His voice becomes heavier	3
Hair start to grow in the genital and underarm area	4
Has pimples	5
Experiencing wet dreams	6
Attracted to girls	7
Like to dress up	8
Other ***(Specify):*** _____.	9
Don't know	99

19.2 For girls

Body becomes more muscled/stronger	1
Breast start to grow	2
Has menstruation every month	3
Hair start to grow in the genital and underarm area	4
Has pimples	5
Attracted to boys	6
Like to dress up	7
Other ***(Specify):*** _____.	8
Don't know	99

20. During which part of the monthly cycle does a woman have the greatest chance of becoming pregnant? ***(Show the card)***

During her period	1
In the middle of her cycle	2
Right after her period has ended	3
Just before her period begins	4
Other ***(Specify):*** _____ .	5
Don't know/can't remember	99

20a. What do you think are the complications with early pregnancy/delivery? ***(Read out the list! mark all that apply)***

Maternal death	1
Premature birth	2
Overweight newborns	3
Spontaneous abortion	4
Stillbirth	5
Low birth weight	6
Bleeding	7
High level of childhood illness	8
Mental and physical disabilities in children	9
No negative effects	88
Don't know	99

21. If you had a reproductive health problem or question, where would you apply for help? Remember, reproductive health problems are problems associated with the reproductive health organs, such as pregnancy, contraceptive concerns, HIV/AIDS, STIs, abortion, etc. ***(Do not read out; Probe by asking, "Anyplace else?" and mark all that apply)***

Gynecologist/doctor	1
Nurse/midwife	2
Pharmacist	3
Peer educator	4
Husband/partner	5
Elder sister/brother	6
Friend	7
Mother	8
Father	9
Grand parents	10
Other relatives	11
Teacher	12
Books	13
Magazines	14
Newspaper, booklets	15
Radio	16
Television	17
Training course/meeting	18
Telephone hotline	19
Other ***(Specify):*** _____ .	20
Don't know	99

22. Where do you think a person can get reproductive health services? **(*Do not read out; mark all; Probe: Anyplace else?)***

Clinic	1
Ambulatory	2
RH cabinets	3
Women consultation	4
Maternity hospitals	5
Pharmacy	6
Traditional healers	7
Telephone hotline	8
Other ***(Specify):*** _____ .	9
Don't know	99

Sexual Relations

23. How regularly are sexual relations discussed among your friends?

Never	1
Occasionally	2
Frequently	3
Constantly	4
Don't know	99

24. Have you sought any information regarding sexual relations in the last 6 months? If so, from where or from whom did you receive the most information? (***one response***)

25. Which source do you consider the most reliable [reliable means accurate or most knowledgeable] source of information about sexual relations? (***one response***)

	(24) Source of information	**(25) Reliable source of information**
Mother	1	1
Father	2	2
Other relatives	3	3
Husband/partner	4	4
Classmate/friend/peer	5	5
Gynecologist/doctor	6	6
Nurse/midwife	7	7
Teacher	8	8
Pharmacist	9	9
Books	10	10
Magazines	11	11
Newspaper, booklets	12	12
Radio	13	13
Television	14	14
Training course/meeting	15	15
Telephone hotline	16	16
Other ***(Specify):*** _____ .	17	17
Have not sought for any information/ none		
Don't know	99	99

25a. Have you heard of a confidential counselling telephone hotline service that youth can call to ask questions about reproductive health?

Yes	1	**Carry on**
No	2	**Skip to Q26**

25b. Have you ever used the telephone hotline service?

Yes	1	**Carry on**
No	2	**Skip to Q26**

25c. How would you rate the counseling you received to your question, on 1 to 5 scale where 1 means not helpful at all and 5 – very helpful?

1=Not helpful at all 5 = Very helpful

(1) (2) (3) (4) (5)

Adolescent Reproductive Health

26. Do you think there are any negative health consequences of having an abortion? If so, what are they? ***(Do not read out and mark all that apply)***

Infections	1
Infertility	2
Bleeding	3
Fever	4

Gastro-intestinal disturbances	5
Vomiting	6
Ripping or perforation of the uterus	7
Anesthesia complications	8
Hemorrhages	9
Cervical injury	10
Shock	11
Other ***(Specify):*** _____ .	12
No negative affects	88
Don't know	99

27. Do you know any methods to avoid getting pregnant? If so, what are they? ***(Do not read out. Probe by asking, "What else?" and circle all that apply.)***

Pills	1
IUD	2
Inject able /Depo-Provera	3
Diaphragm/foam tablets/jelly/cream	4
Condom	5
Norplant	6
Contraceptive (unspecified)	7
Traditional method *(specify):* _____	8
Non-penetrative sex	9
Rectal sex	10
Herbs	11
Male sterilization	12
Female sterilization	13
Abstinence	14
Emergency contraception	15
Natural family planning/billing method	16
Withdrawal	17
Douching	18
Other ***(Specify):*** _____ .	19
Don't know/don't remember	99

28. What does "safe sex" mean to you*? (**Do not read out. Probe by asking "What else?" and circle all responses.)*

Abstaining from sex	1
Using condom	2
Avoiding multiple sex partners	3
Avoiding sex with prostitutes	4
Other ***(Specify):*** _____ .	5
Don't know	99

29. What are the main reasons for using a condom? ***(mark all that apply)***

Avoid pregnancy	1
STI protection	2
AIDS protection	3
Other ***(Specify):*** _____ .	4
Don't know	99

30. There is an approach to teach adolescents about a healthy lifestyle, especially about reproductive health, in an easy to remember way. The approach is called ABCD. Have you heard of this approach?

Yes	1	**Carry on**
No	2	**Skip to Q32**

31. If yes, please tell me what each of the letters stand for ***(Do not read out; mark all that apply)***

		Correct	Incorrect/ don't know
1	A – abstinence	1	99
2	B - be faithful	1	99
3	C – used condoms	1	99
4	D- don't use drugs	1	99

31a. When you get to a pharmacy for reproductive health products/counseling, which of the following characteristics of pharmacy do you prefer? (Show card; read out the list and code respectively. If none of the parameters matter for the respondents, mark number 3).

1	**Parameters**						**Parameters**
2	Small building	1	2	3	4	5	Big building
3	Separate place for consulting	1	2	3	4	5	One large open area
4	Independent	1	2	3	4	5	Large chain
5	Near house	1	2	3	4	5	Far from house
6	Sales people I know	1	2	3	4	5	salespeople I don't know
7	Male sales person	1	2	3	4	5	Female sales person

STIs, and RTI HIV/AIDS

32. Do you know any infections a person can get through sexual intercourse? If yes, which one do you know?
(Do not read out . Probe by asking, "What others?" and circle all that applies.)

HIV/AIDS	1
Gonorrhea	2
Syphilis	3
Genital warts	6
Genital herpes	7
Hepatitis B	8
Other ***(Specify):*** _____ .	9
Don't know	99

33. What signs or symptoms suggest that a person has a sexually transmitted infection (STI)?
(Do not read out. Probe by asking, What others?" and circle all that applies.)

Discharge from penis/vagina	1
Burning pain or itching in penis/vagina	2
Abnormal vaginal bleeding	3
Loss of weight	4
Sores or warts on penis/vagina	5
Painful urination	6
Swelling in groin region	7
Other ***(Specify):*** _____ .	8
Don't know	99

Q34 is asked if the respondent didn't name AIDS as sexually transmitted infection in Q32.

34. Have you heard of an illness/disease called AIDS?

Yes	1	**Carry on**
No	2	**Skip to Q 37**

35. Please name all the ways in which you believe a person can get AIDS. ***(Do not read out. Probe by asking, "Anything else?"And circle all that apply.)***

Sexual relations	1
Sharing syringes/unclean medical equipment	2
Blood transfusions	3
Mother to child during birth	4
Mosquito or other insect bites	5
Through breast milk	6
Casual contact with infected person (e.g., sharing food, cup or glass; handshake, cough or sneeze)	7
Other ***(Specify):*** _____ .	8
Don't know/can't remember	99

36. Can a person avoid getting AIDS? If yes, what he/she should do? ***(Probe by asking, "What else?" and circle all that apply.)***

Avoid sex completely/abstinence	1
Stay faithful to partner	2
Encourage partner to stay faithful	3
Avoid contaminated blood	4
Use condoms for every act of sexual intercourse	5
Avoid sharing syringes	6
Avoid commercial sex workers	7
Avoid casual sex	8
Other ***(Specify):*** _____.	9
Don't know/can't remember	99

Self-administered interview/questions

Once again, I would like to assure you that all responses are strictly confidential and anonymous. Your sincere answers will enable the researchers to develop unbiased assessment of the situation and will help in the design of reproductive health programmes in Imereti region.

Please answer the following questions on your own. When you finish, please put the questionnaire in the envelope, which is presented by the interviewer.

37. Have you ever had a sexual relation?

Yes	1	**Carry on**
No	2	**Skip to Q41**

38. Did you use any kind of contraceptive during your last sexual act?

Yes	1	**Carry on**
No	2	**Skip to Q41**

39. During you last sexual intercourse, what method did you use to avoid getting pregnant?

Pills	1
IUD	2
Injectable/Depo-Provera	3
Diaphragm/foam tablets/jelly/cream	4
Condom	5
Norplant	6
Contraceptive (unspecified)	7
Traditional method *(specify):* _____	8
Non-penetrative sex	9
Rental sex	10
Herbs	11
Male sterilization	12
Female sterilization	13
Abstinence	14
Emergency contraception	15
Natural family planning/billing method	16
Withdrawal	17
Douching	18
Other ***(Specify):*** _____.	19
Don't know/don' remember	99

40. Where did you get it or where did you get information on this method?

Clinic/ambulatory	1
Medical person	2
Peer advisor	3
Youth center	4
Friend	5
Relative	6
Pharmacy	7
Women Consultation	8
Non-governmental organizations	9
Youth	10
Partner	11
Books	12
Printed materials (booklets, etc)	13
Training courses/seminars	14
Other ***(Specify):*** _____.	15
Don't know/ don' remember	99

41. Which of the following attitudes best describes your plans about using a contraceptive the first/next time you have sexual intercourse*? **(Mark single code)***

I plan to use a contraceptive and will not have sex without using one.	1
I plan to use a contraceptive, as long as it's convenient.	2
I plan to use a contraceptive, as long as my partner doesn't object	3
I plan to use a contraceptive only if my partner insists on it.	4
I do not plan to use a contraceptive	5
Other ***(Specify):*** _____.	6
I haven't thought about it	99

Thank you very much for your time!

Notes

An interviewer should complete this section upon completion of the interview

Q1. What was the respondent's general reaction on the interview?

1=very negative 5=very positive

(1) (2) (3) (4) (5)

Q2. In general, how honest was the respondent?

1= not honest at all 5=very honest

(1) (2) (3) (4) (5)